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Historical Sketch

Youngstown State University traces its beginnings to a commercial law course offered by the Young Men’s Christian Association (YMCA) in 1908. The YMCA had offered high school level and vocational courses since 1888, but it wanted to meet the college-level needs of area residents in a society undergoing rapid industrialization and urbanization. The “Y” offered courses on law, business, and engineering, and in 1910, it even instituted a School of Law that granted no degree but prepared students to take the bar exam. In 1916, the YMCA incorporated all of its educational work under the Youngstown Association School.

By the early 1920s, the Ohio Board of Education granted the School of Law the power to confer the Bachelor of Science in Law degree, and in 1924 the School of Commerce and Finance the right to confer the bachelor’s degree in commercial science. The YMCA also offered courses to prepare teachers for certification, a program that evolved by 1927 into a separate school named Youngstown College and recognized by the State Department of Education. That same year, the school also established the College of Liberal Arts. Throughout the 1920s, the schools of law and commercial science were called the Youngstown Institute of Technology, which began a move from downtown to the present location with the purchase of several mansions owned by the Wicks and other prominent Youngstown families.

In 1931, the YMCA constructed its first classroom building, the present-day Jones Hall, and appointed Howard Jones as the educational director. By the mid-1930s, the Board of Directors decided to incorporate with the official name of Youngstown College separate from the other “Y” educational efforts; they appointed Howard Jones as the first president, a position he held until 1966.

In 1944, the trustees of the Young Men’s Christian Association transferred control of the institution to the members of the Corporation of Youngstown College, and in 1955 the corporation was rechartered as The Youngstown University. The University joined the Ohio system of higher education in September 1967 as Youngstown State University.

Dana’s Musical Institute, founded in nearby Warren in 1869, became Dana’s Musical Institute of Youngstown College in 1941. In 1946, the Engineering Department, organized several years before, became the William Rayen School of Engineering; two years later, the Business Administration Department became the School of Business Administration; and in 1981 the school name was changed to the Warren P. Williamson, Jr. School of Business Administration. In 1960, the Education Department became the School of Education.

The Graduate School and College of Applied Science and Technology were created in 1968, and, in 1974, the College of Creative Arts and Communication was established.

In 1972, Youngstown State University, with the University of Akron and Kent State University formed a consortium to sponsor the Northeastern Universities College of Medicine, which enrolled its first students in 1975.

In 1991 the engineering technology departments separated from CAST and joined the new College of Engineering and Technology; the remaining departments formed the new College of Health and Human Services.

In 2007, the College of Science, Technology, Engineering, and Mathematics departments from the College of Arts and Sciences. This reorganization linked science, technology, engineering, and mathematics in one academic college, and the humanities and social sciences in another college.

Youngstown State University now consists of the College of Graduate Studies and six undergraduate academic colleges:

- Beeghly College of Liberal Arts, Social Sciences, and Education
- Bitonte College of Health and Human Services
- Cliffe College of Creative Arts
- College of Science, Technology, Engineering, and Mathematics
- Williamson College of Business Administration

Degrees offered range from the associate, bachelor’s, and master’s to a Doctorate in Educational Leadership, a Doctor of Physical Therapy, Doctor of Philosophy in Materials Science and Engineering and a Doctor of Philosophy in Health Sciences.
Accreditation
Youngstown State University is accredited by the Higher Learning Commission (HLC) (telephone: (312) 263-0456 or (800) 621-7440). The HLC is an independent corporation that was founded in 1895 as one of six regional institutional accreditors in the United States. Please write to info@hlcommission.org (hlcommission.org) if you have any questions.

For more information about YSU's accreditation, visit the Statement of Accreditation Status (https://www.hlcommission.org/component/directory/?Action=ShowBasic&Itemid=&Instid=1613).

Academic programs within the individual colleges may be further accredited by their respective professional bodies. Those accreditations are listed in each college section.

Assessment
The Youngstown State University Institute for Teaching and Learning coordinates and supports continuous improvement activities across campus, including academic, co-curricular, and general education program student learning assessment. We support the accreditation standards of the Higher Learning Commission by assisting faculty and staff in systematic, comprehensive assessment and improvement of student learning. The Youngstown State University Mission and 2020 Strategic Plan guide our work in building a positive culture of assessment, using data responsibly to improve institutional practice, and using assessment to support and promote student success. A systematic feedback loop also enables both academic and co-curricular units to share information about student learning with students, faculty, staff, and appropriate organizations. All information is shared in aggregate form only, and confidentiality of individual students is safeguarded. If assessment information is shared beyond internal efforts of program improvement or accreditation, departments and the Institute for Teaching and Learning abide by the Institutional Review Board guidelines at YSU and FERPA regulations, as appropriate.

For more information, visit the Institute for Teaching and Learning’s Assessment (https://ysu.edu/assessment/) page.

Offices of Equal Opportunity and Policy Development and Title IX

Equal Opportunity and Non-Discrimination
Youngstown State University Non-Discrimination Statement: Youngstown State University does not discriminate on the basis of race, color, national origin, sex, sexual orientation, gender identity and/or gender expression, disability, age, religion, veteran/military status, or any other status protected by law, in its programs and activities.

OFFICE OF EQUAL OPPORTUNITY AND POLICY DEVELOPMENT
The Office of Equal Opportunity and Policy Development is responsible for the review and development of University policies and for University compliance with state and federal equal opportunity laws and regulations, including Title VII of the Civil Rights Act of 1964. The office works to develop and implement the University’s Affirmative Action plan, develops University policies, provides training and educational programs in the areas of affirmative action, equal employment, discrimination, and harassment, and investigates complaints of discrimination and harassment based on protected class status.

Director, Equal Opportunity and Policy Development:
Mark Weir
One University Plaza, Tod Hall, Room 301
Youngstown, Ohio 44555
330-941-2216
Fax: 330-941-2394
mweir@ysu.edu

Title IX Office
The Title IX office oversees compliance with Title IX of the Education Amendments of 1972. The office provides training and educational programs in the areas of consent, sexual assault, and relationship violence, and investigates complaints of discrimination and harassment based on sex or gender, whether involving students, faculty, staff, or others. This includes complaints of sex or gender bias, sexual harassment, stalking, intimate partner violence, domestic violence, sexual exploitation, or other sexual misconduct.

The Director assists complainants in understanding reporting options, resources, and approves academic accommodations, as needed.

Title IX:
One University Plaza, Tod Hall, Room 301
Youngstown, Ohio 44555
330-941-4629
Fax: 330-941-2394
titleix@ysu.edu (titleix@ysu.edu)

Americans with disabilities Act (ADA) Compliance
Students seeking information about or access to accommodations or support for a documented disability should contact the Disability Services Office. Employees of the University and others seeking such information or resources should contact the human Resources Title II/Section 504 Coordinator.

Assistant Director, Disability Services:
Gina McGranahan
One University Plaza, Kilcawley Center, Room 2082
Youngstown, Ohio 44555
330-941-2090
glm McGranahan@ysu.edu

Title II/Section 504 Coordinator:
Stacey Luce
One University Plaza, Tod Hall, Room 312
Youngstown, Ohio 44555

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glm McGranahan@ysu.edu

Title II/Section 504 Coordinator:
Stacey Luce
One University Plaza, Tod Hall, Room 312
Youngstown, Ohio 44555

Office of Diversity, Equity, and Inclusion

Diversity, Equity, and Inclusion
The Office of Diversity, Equity, and Inclusion (DEI) serves the Youngstown State University community as an educational resource enabling students, staff, and faculty to gain a better understanding of what it means to live in a pluralistic society. We promote this understanding through the development of workshops and collaborations. Providing educational resources based upon research studies and real-life experiences, we are here to help students develop a connection to campus while supporting staff and faculty as they develop an inclusive mindset. DEI is also where students can find several mentoring programs. Faculty and staff collaborate in these programs while learning more about the students who choose to come to YSU. The DEI staff has the ability to assist our community members in navigating difficult conversations.

For more information, contact:
Carol Bennett
Assistant Provost for Diversity, Equity, and Inclusion
Jones Hall 1004
(330) 941-3522

For more information, visit the Institute for Teaching and Learning’s Assessment (https://ysu.edu/assessment/) page.
Degrees Granted

Youngstown State University grants the following baccalaureate and associate degrees:

- Bachelor of Arts (BA)
- Bachelor of Engineering (BE)
- Bachelor of Fine Arts (BFA)
- Bachelor of General Studies (BGS)
- Bachelor of Music (BM)
- Bachelor of Science (BS)
- Bachelor of Science in Applied Science (BS in AS)
- Bachelor of Science in Business Administration (BS in BA)
- Bachelor of Science in Dental Hygiene (BSDH)
- Bachelor of Science in Education (BS in Ed)
- Bachelor of Science in Nursing (BSN)
- Bachelor of Science in Respiratory Care (BSRC)
- Bachelor of Social Work (BSW)
- Associate of Arts (AA)

All bachelor's and associate degrees may be taken as honors degrees. A combined BS/MD degree is offered in conjunction with the Northeast Ohio Medical University.

Admission

Undergraduate admission is handled by the Office of Admissions, located in Sweeney Welcome Center at the corner of University Plaza and Bryson Street. You may contact the Admissions Office in any of the following ways:

Phone: Toll free (877) GO-TO-YSU | (877) 468-6978 | (330) 941-2000
TDD: (330) 941-1564
Fax: (330) 941-3674
E-Mail: enroll@ysu.edu
YSU Web Site
Admissions Web Site

The Office of Admissions is open on weekdays and selected Saturdays. Please call the numbers above or visit the website for times. Campus tours are available twice daily Monday through Friday and on selected Saturdays. Tours can be scheduled by calling the Admissions Office (https://cms.ysu.edu/administrative-offices/admissions/undergraduate-campus-visits/) or by scheduling online.

Tours are best scheduled a week or more in advance and stops are open to the YSU campus and stop in the office any time without an appointment. If you schedule ahead, we can arrange free parking; otherwise, visitors can park in the F-1 (University Plaza) lot across from the Sweeney Welcome Center for a nominal fee that covers parking for a full day.

Admission to the University does not guarantee admission to every program. Some programs within the University have separate admission standards that must be met before a student may enroll in that particular program. Developmental courses are available to assist in satisfying scholastic deficiencies. Those students who lack high school subjects required by the various colleges within the University may be admitted with the understanding that these courses will be completed as soon as possible and no later than the end of the college sophomore year.

Academically qualified 7-12th grade students may apply and enroll in courses prior to high school graduation through the College Credit Plus (CCP) program. For more information, visit the CCP website (https://ysu.edu/ocat/college-credit-plus/) or click on Special Academic Programs (http://catalog.ysu.edu/undergraduate/general-information/special-academic-programs/) and scroll down to Early Enrollment Opportunities.

Admission With Conditions

Students may be admitted to YSU with conditions under certain circumstances. Please see Conditional Admission for more information.

State Residency Status

Place of residence for admission and tuition purposes will be determined at the time of admission or readmission by the Office of Admissions on the basis of the residency rules stated in the Ohio Revised Code (http://codes.ohio.gov/oac/3333-1-10/) and from the information supplied on the "Application for Admission" or the "Undergraduate Application for Readmission" form.

If at any time you have questions about your appropriate classification, you should immediately bring it to the attention of the Office of Admissions for review. Students requesting Ohio residency are required to complete a State of Residency Verification form, available by request from the Office of Admissions, and provide additional supporting documentation. A change to
residential status cannot be made retroactive if supporting documentation is received after the first day of the requested semester.

**Residency Status Appeal**

After the Office of Admissions makes its determination, a decision will be sent in writing to the student. If a student wishes to appeal the decision, she or he can request an appearance before the Residence Classification Board. Such appearances occur within two weeks of the request, if possible. The Residence Classification Board’s appellate decision is final.

Please see Ohio Residency (p. 57) of this Undergraduate Catalog for the complete text of the Ohio Department of Higher Education residency criteria.

**Application Fee**

A non-refundable application fee of $45 is required unless the applicant is a former YSU student, or those who have served or are currently serving in the Armed Forces of the United States.

**High School Preparation**

Students desiring to pursue a baccalaureate degree should have completed the following college preparatory units:

**Baccalaureate Degree College Preparatory Units**

<table>
<thead>
<tr>
<th>Subject</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>4</td>
</tr>
<tr>
<td>Mathematics</td>
<td>4</td>
</tr>
<tr>
<td>Science</td>
<td>3</td>
</tr>
<tr>
<td>Social Studies</td>
<td>3</td>
</tr>
<tr>
<td>Foreign Language</td>
<td>2</td>
</tr>
<tr>
<td>Arts</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

1 Two units in one language

It is recommended that coursework include:

- English composition
- Algebra 1, Algebra 2, and Geometry
- Laboratory science
- United States history and government

In addition, the Bachelor of Engineering (BE) degree program suggests a unit of mechanical drawing, one-half unit of trigonometry, and in the sciences, one unit of chemistry and one unit of physics specifically. Students interested in programs such as computer information systems, physical sciences, and mathematics should also take a fourth year of mathematics. For the Bachelor of Music (BM) degree program, the applicants are expected to have proficiency in one or more branches of applied music. See the Dana School of Music (p. 282) section.

Students wishing to pursue an associate degree should have completed the following college preparatory units:

**Associate Degree College Preparatory Units**

<table>
<thead>
<tr>
<th>Subject</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>4</td>
</tr>
<tr>
<td>Mathematics</td>
<td>2</td>
</tr>
<tr>
<td>Science</td>
<td>2</td>
</tr>
<tr>
<td>Social Studies</td>
<td>2</td>
</tr>
<tr>
<td>Other Subjects</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

Students admitted to the University may have their high school records evaluated by the college in which they are enrolled. Specific coursework, in addition to what is listed above, may be required in order to be accepted into a specific program or major. Since such coursework may vary depending on the college and degree requirements, students should check with advisors as to the academic expectations that need to be met.

**Admission with Non-Traditional Credit**

You may be admitted to Youngstown State University with credits from non-traditional educational sources.

**Prior Learning Assessment Credit**

Prior Learning Assessment (PLA) is an option that enables students to demonstrate what they have learned outside the classroom and translate that learning into college credit. Prior Learning Assessment validates learning acquired through corporate training programs, extensive volunteer activity, military service, workplace experience, civic engagement, individual readings and studies, training sponsored by professional organizations, and training sponsored by governmental agencies. Credit is awarded for college-level learning (knowledge, skills, and competencies) that students have obtained as a result of their prior learning experiences.

Students must demonstrate their mastery of the knowledge in a subject area in order to earn college credit. Prior learning can be verified by one or more of the following:

- performance on standardized tests or department challenge exams
- creation and evaluation of a portfolio
- demonstration of military service learning
- obtainment of professional certifications

Some certifications awarded by accrediting organizations are given automatic academic credit at YSU once proper paperwork is completed and proof of certification is presented. Please visit the Prior Learning Assessment Crosswalks (https://ysu.edu/prior-learning-assessment/training-certification-crosswalks/) webpage and look at crosswalks. If you have a certificate that is awarded immediate credit, please contact Dr. Tammy A. King, PLA Coordinator, at taking@ysu.edu for assistance with the required paperwork for obtaining the credit.

YSU has partnered with FastPathOhio (http://fastpathohio.com/) to assist students with the development of portfolios. Before completing a portfolio for credit, please contact the PLA Coordinator.

For more information regarding PLA credit and guidelines, please see the Prior Learning Assessment (https://ysu.edu/prior-learning-assessment/) website.

**Veterans**

The US Military is considered one of the finest training institutions in the world. Every Veteran or currently serving military student is entitled to a review of his or her military training to determine if college credit can be awarded.

Military Veterans, current service members (Active, Reserve and Guard) and certain qualified dependents often arrive at the university with various Department of Defense (DOD), Veterans Administration (VA) or State of Ohio Education benefits. The Office of Veterans Affairs located at the Carl A. Nunziato Veterans Resource Center, 633 Wick Avenue, Youngstown State University helps these military connected students make sense of their education benefits. Youngstown State University will not engage in unethical recruitment practices of this protected student population. Unacceptable practices include offering inducements to any individual for the purpose of securing enrollments of Service members, providing commission, bonus or other incentive payment based directly or indirectly on securing Service member enrollments, or engaging in high-pressure recruitment tactics.
Student Veterans at Youngstown State University are afforded certain benefits in recognition for their service to country. The benefits include but are not limited to:

- waiver of application and orientation fees
- advocacy services
- disability services
- weekly communications relative to veterans
- student veterans group
- military friendly deployment practices
- special recognition at graduation
- access to the Veterans Resource Center
- evaluation of military transcripts

Courses taken through the United States Armed Forces Institute (USAFI) or the Defense Activity for Non-Traditional Education Support (DANTES) as well as certain formal service school courses will be considered for transfer toward the student’s degree program. USAFI or DANTES courses must be evidenced by an official transcript, and service school courses through the (JST) Joint Service Transcript (Army, Navy, Marines, Coast Guard) or the (CCAF) Community College of the Air Force Transcript.

An individual who has served or is serving in the United States Armed Forces and has completed Basic Military Training will receive appropriate credit for that training. Credit may also be granted for “military job skill training” obtained while a member of the U.S. Armed Forces. A copy of the applicant’s DD Form 214 and JST or CCAF must be supplied to the Office of Veterans Affairs in order to validate and award such credit. Be advised that credit awarded for various military education may not relate, or be applicable to the student’s chosen field of study and as a result may not fulfill specific degree requirements. Every effort will be made to maximize the amount of college credit awarded for military training.

In addition, current military members (Active, Guard and Reserve), when called away to official duty during the semester, will be given special consideration as it applies to late withdrawals, and re-admission to programs in which they satisfactorily participate.

Courses taken through the United States Armed Forces Institute (USAFI) or the Defense Activity for Non-Traditional Education Support (DANTES) as well as certain formal service school courses will be considered for transfer toward the student’s degree program. USAFI or DANTES courses must be evidenced by an official transcript, and service school courses through the (JST) Joint Service Transcript (Army, Navy, Marines, Coast Guard) or the (CCAF) Community College of the Air Force Transcript.

In accordance with the Veterans Benefits and Transition Act of 2018, Youngstown State University will not impose any penalty, including the assessment of late fees, the denial of access to classes, libraries or other institutional facilities, or the requirement that a Chapter 31 or Chapter 33 recipient borrow additional funds to cover the individual’s inability to meet his or her financial obligations to the institution due to the delayed disbursement of a payment by the U.S. Department of Veterans Affairs. Note: proper documentation of eligibility for these VA benefits must be on file at the YSU Office of Veterans Affairs.

Questions should be addressed to the Office of Veterans Affairs, (330) 941-2503. See the Office of Veterans Affairs (http://cms.ysu.edu/administrative-offices/veterans-affairs/office-veteran-affairs/) website for more information.

Credit By Examination
Credit by examination is available to students who satisfactorily complete the appropriate subject examination.

The three available credit-by-exam opportunities include:

- Advanced Placement Program (APP) - available only through student’s high school.
- College Level Examination Program (CLEP)
- Departmental Examinations - Call the specific department for a list of available exams and registration information.

Guidelines for students taking credit by examination:

- Students may not take a CLEP test, department challenge exam, or other credit by exam opportunity for any course in which they are currently enrolled or have previously been enrolled and earned an evaluative grade.
- Students who have already received credit for coursework for a subject in which the courses are sequential may not receive academic credit by means of CLEP, department challenge exam, or other credit by exam opportunity for an earlier prerequisite course.
- Students pursuing a baccalaureate degree may use a maximum total of 30 semester hours of credit by exam applied to their degree; an associate degree may have a maximum total of 15 semester hours of credit by exam applied to their degree.

Online Credit
The University will accept online work taken in connection with a regionally accredited institution under the same circumstances as provided in the section titled “Transfer Credit.”

Transient Applicants
A student seeking a degree at another institution may ordinarily take one semester of course work at YSU as a transient student. The student must apply for admission to the University and provide a statement from the registrar from the student’s current institution that she or he is in good standing. Only students in good academic standing and eligible to return to their institution will be permitted to enroll as transients. Students who wish to remain as a transient student for a second consecutive semester should contact Admissions.

Former Student Applicants
All students who have interrupted their attendance at Youngstown State University for three consecutive semesters must reapply. Information regarding readmission can be found at undergraduate readmission (https://cms.ysu.edu/administrative-offices/registrar/readmission-former-students/). Students who have attended any accredited college or university since last attending YSU must contact the Office of Admissions, submit a Former Transfer application and provide all official documentation described under, “Credentials for Transfer Students.”

Non-Matriculated Admission
The option of non-matriculated admission provides an opportunity for adults out of high school two or more years to enroll in undergraduate courses without completion of the regular admission process. High school or previous collegiate transcripts are not required until the non-matriculated student completes 18 credit hours or decides to seek admission to a degree program. Coursework taken in the 18 semester hours as a non-matriculated student can be applied to a degree program at Youngstown State University. Non-matriculated students are able to register only after current students have registered.

Applications for non-matriculated admission can be obtained through the Office of Admissions.

Suspended Students
A former student who was academically suspended must apply for reinstatement to the dean of the college he or she wishes to attend. Reinstatement procedures may vary with the college. For details, consult either the Office of Records or the appropriate dean’s office.

See Grade Requirements (p. 45) for rules regarding suspension and reinstatement.
Application Deadlines
We encourage all students to apply at least two months prior to the application closing dates listed below. Review of applications received after these dates cannot be guaranteed.

Fall Semester 2020
Freshman
Application Deadline: Aug. 1
Credentials Deadline: Aug. 1
Former Transfer and Transfer
Application Deadline: Aug. 1
Credentials Deadline: Aug. 15
Former Transient and Transient
Application Deadline: Aug. 1
Credentials Deadline: Aug. 15
Beginning Dates for Each Semester Monday, Aug. 17, 2020

Spring Semester 2021
Freshman
Application Deadline: Dec. 1
Credentials Deadline: Dec. 1
Former Transfer and Transfer
Application Deadline: Dec. 1
Credentials Deadline: Dec. 15
Former Transient and Transient
Application Deadline: Dec. 1
Credential Deadline: Dec. 15
Beginning Dates for Each Semester Monday, Jan. 11, 2021

Summer Semester 2021
Freshman
Application Deadline: Apr. 15
Credentials Deadline: Apr. 15
Former Transfer and Transfer
Application Deadline Summer I: Apr. 15
Credentials Deadline Summer I: May 15
Application Deadline: Summer II: May 15
Credentials Deadline: Summer II: June 1
Former Transient and Transient
Application Deadline Summer I: Apr. 15
Credentials Deadline Summer I: May 15
Application Deadline: Summer II: May 15
Credentials Deadline: Summer II: June 1
Beginning Dates for Each Semester Full-Term, First 7-Week Term: Monday, May 17, 2021
Second 7-Week Term: Monday, July 6, 2021

International Student Applicants
Youngstown State University welcomes applications from qualified students around the world. The University’s International Programs Office (IPO) provides a wide range of support services for international students, described in detail in other sections of this Undergraduate Catalog.

Applicants who are not U.S. citizens or legal permanent residents apply for admission through the IPO.

For issuance of an immigration document, F-1 and J-1 students must demonstrate the financial ability to pay for at least one year of academic and living expenses.

General Admission Statement
The admission information contained in this section reflects standard admissions requirements. Meeting these requirements does not guarantee admission to the university or to specific programs.

Academic Credentials
Academic credentials include high school and college transcripts, test scores, GED scores, and/or any other records required for admission or granting credit. Only properly certified and signed credentials issued to YSU and received directly from the issuing institution will be accepted. All must be in a sealed envelope(s) from the issuing institution. Admission may be offered in certain cases to applicants who submit certified copies of credentials. Students admitted with copies will be required to produce all original documents by the end of their first term of enrollment.

International Application Deadlines
<table>
<thead>
<tr>
<th>Semester</th>
<th>Freshman</th>
<th>Transfer from U.S. Institutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>June 1</td>
<td>June 15</td>
</tr>
<tr>
<td>Spring</td>
<td>November 1</td>
<td>November 15</td>
</tr>
</tbody>
</table>

International Freshman and Overseas Transfer Students
Applicants from overseas must submit the following information well in advance of the desired date of admission. Admission is possible during all terms provided the deadline for application is met. Students must attend the mandatory new international student orientation.

- A completed application form, a $45 non-refundable application fee and a list of all educational experiences including studies undertaken in the U.S. Applicants seeking F-1 or J-1 (student) non-immigrant status must submit certification of sufficient financial resources available for education and living expenses while attending the University.
- Official credentials and transcripts from all secondary schools, colleges, and universities that the student has attended, including subjects studied, grades, and a key to the grading system. If credentials are not in English, official translations may be required. Transfer credits may be granted for courses taken at U.S. and overseas accredited institutions only if an official syllabus or course description is provided; evaluation of transfer credit will be made prior to the start of classes. Evidence of academic and disciplinary good standing at the last prior institution with a minimum grade point average of 2.00 (on a 4.00 scale). Some YSU programs may have higher requirements.
- Transfer applicants must submit official transcripts and syllabi for all college-level work as described above.
- English Language Proficiency - Applicants whose education is from an English-medium secondary or post-secondary institution in certain countries are exempt from the standardized English proficiency testing requirement. See Information on International English Proficiency (https://ysu.edu/international-programs-office/apply-now/quick-menu/more-
New Freshman Applicants

Application Requirements

Students planning to participate in intercollegiate athletics in their first year at YSU must take either the SAT or the ACT prior to enrolling in college. Please call the Office of Intercollegiate Athletics at (330) 941-2282 for more information about eligibility for athletics participation.

Athletics Participation

Students planning to participate in intercollegiate athletics in their first year at YSU must take either the SAT or the ACT prior to enrolling in college. Please call the Office of Intercollegiate Athletics at (330) 941-2282 for more information about eligibility for athletics participation.

English Requirement

YSU requires proof that you have sufficient knowledge of the English language to follow your program of study. If your native language is not English, please see International Student Applicants (https://ysu.edu/international-programs-office/english-proficiency-requirements/).
Articulated Credit

In the presence of a formal bi-lateral agreement between Youngstown State University and a particular career center or high school, students may earn college credit for specified technical courses they successfully completed in high school. Youngstown State University has many program-specific articulation agreements with career and technical centers and high schools in northeast Ohio. Students in those approved articulated programs of study receive instructions from their career and technical center or high school about how to have earned credits posted to their YSU transcripts after they enroll at YSU and meet college readiness criteria. Students who complete career-technical programs of study may also receive specified articulated college credit. Students have 18 months from high school graduation to apply for the credit. For information about College Tech Prep (https://ysu.edu/college-tech-prep-special-projects/) at YSU, visit their website.

High School Transcripts

Applicants must arrange to have their high schools send to the Office of Admissions a record of all work completed. Partial transcripts will be given consideration for early decisions. If the applicant's record clearly indicates satisfactory completion, notification of conditional acceptance will be made before high school graduation. Final high school transcripts showing a graduation date must be received prior to the first day of the semester in which the student is enrolled.

Conditional Admission

In certain situations, students with a high school GPA and/or ACT/SAT scores that do not meet the requirements for admission to YSU may be offered conditional admission.

Conditionally admitted status is not to be applied to students in the BCHHS’s Emergency Medical Services Certificate and Police Academy programs. Students accepted in the Police Academy are not required to take the placement test.

Students entering Distance Learning Programs will not be considered for conditional admission status.

If a Youngstown Early College (YEC) student has earned a GPA of 2.00 or above and has passed all required developmental courses, the student’s ACT or SAT test score will not be considered in establishing the student's conditional admission status.

Strong Start

Incoming first-time students with a high school grade point average below 2.00 (out of 4.00) or a composite ACT below 17 (or SAT evidence based writing and reading and math composite below 920), are offered admission to YSU through the Strong Start Program.

Students offered admission to YSU through the Strong Start Program:

• may only begin in the fall semester.
• are required to attend new student orientation; failure to do so will defer admittance to a subsequent fall semester.
• will be classified as an Exploring Undecided major during their first year, at the end of which they may declare a major.
• Must earn a C or better in their FYE course
• Must achieve good academic standing (a GPA of 2.00 or above) at the end of their first semester. Students who do not earn at last a 2.0 shall be dismissed from the university.

Transfer Students

Transfer students with a transfer GPA below 2.00 (out of 4.00), are not eligible for regular admission, but may be admitted with conditions after review by the Admissions Committee.

Conditionally admitted transfer students must meet the following requirements:

1. Conditionally admitted transfer students shall not be admitted during the summer session. Students who place into conditional admission status based on placement testing in the summer term will have their start date deferred to the fall semester.
2. Conditionally admitted transfer students are required to attend new student orientation; failure to do so will defer admittance to a subsequent semester. Transfer students may meet this requirement by attending a regular or transfer orientation or by completing the online orientation module for transfer students.
3. Conditionally admitted transfer students shall be classified as having an undetermined major (CLASS, BCIE, BCHHS), a pre-major (STEM, CCAC) or an undeclared Business major (WCBA) designation, a status that shall remain until the student satisfies all requirements to exit the conditional admission classification.
4. During their first semester, conditionally admitted transfer students must fulfill a contract with the Center for Student Progress, which includes meeting weekly with their academic coach and two times during the term with their academic advisor.
5. Conditionally admitted transfer students cannot register for more than 14 semester hours of courses in a single semester.
6. Students placing into RSS 1510A (https://catalog.ysu.edu/search/?P=RSS %201510A) Advanced College Success Skills, ENGL 1541 Fundamentals of College Writing or ENGL 1549 Writing 1 with Support must take these courses in their first semester. Students may not withdraw from these courses unless they make a complete withdrawal from the university.
7. Conditionally admitted transfer students are restricted to an approved list of courses (see course listing below).
8. All conditionally admitted transfer students are to be advised by their college's professional advisors and not by faculty or departmental advisors.
9. Conditionally admitted transfer students must complete the College Tech Prep module for transfer students.
10. Failure to fulfill the first semester guidelines and achieve good academic standing (a GPA of 2.00 or above) shall result in the conditionally admitted transfer student being dismissed from the university. The student may not be admitted to any other YSU college until the dismissal period has expired.

The restrictions imposed on coursework and semester hours will be removed when the student has done the following:

1. Successfully completed all developmental courses into which the student has tested:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 1541</td>
<td>Introduction to College Writing</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 1549</td>
<td>Writing 1 with Support</td>
<td>4</td>
</tr>
<tr>
<td>RSS 1510A</td>
<td>Advanced College Success Skills</td>
<td>3</td>
</tr>
</tbody>
</table>

2. Successfully completed six semester hours of non-developmental courses.
3. Achieved good academic standing (a GPA of 2.00 or above). See the Undergraduate Catalog (https://catalog.ysu.edu/undergraduate/) for more information on academic standing.
4. Fulfilled the conditional admission contract.

Students fulfilling these requirements may file a petition with a college academic advisor to have the restrictions and their conditionally admitted status removed.
Students without an ACT/SAT score or HS GPA

If a student has not taken the ACT or SAT, or does not have a high school GPA, the student is not eligible for regular admission, but may be admitted with conditions until a placement test is taken. A student who earns a score of less than 232 on the reading placement test will remain conditionally admitted. If a student places into ENGL 1541, the student will also remain conditionally admitted. If a student scores 232 or above and tests out of ENGL 1541, the conditionally admitted status is removed.

If a student scores 232 or above and tests out of ENGL 1541, the student will also remain conditionally admitted. A student who earns a score of less than 232 on the reading placement test will remain conditionally admitted. Students without an ACT/SAT score or HS GPA are eligible to have technical credit transfer to public colleges and universities. This transfer of credit is described in Career-Technical Assurance Guides (CTAG). Students are guaranteed the transfer of applicable credits for the SPS Domain of the GER:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>KSS 1537</td>
<td>Aquatic Exercise</td>
<td>1</td>
</tr>
<tr>
<td>KSS 1544</td>
<td>Step Aerobics</td>
<td>3</td>
</tr>
<tr>
<td>KSS 1545</td>
<td>Fold and Square Dance</td>
<td>3</td>
</tr>
<tr>
<td>KSS 1548</td>
<td>Aerobic Dance</td>
<td>3</td>
</tr>
<tr>
<td>KSS 1554</td>
<td>Fitness Walking</td>
<td>1</td>
</tr>
<tr>
<td>KSS 1555</td>
<td>Jogging</td>
<td>1</td>
</tr>
<tr>
<td>KSS 1556</td>
<td>Racquetball 2</td>
<td>2</td>
</tr>
<tr>
<td>KSS 1557</td>
<td>Weight Training</td>
<td>3</td>
</tr>
<tr>
<td>KSS 1564</td>
<td>Bicycling</td>
<td>3</td>
</tr>
<tr>
<td>KSS 1565</td>
<td>Self Defense</td>
<td>3</td>
</tr>
<tr>
<td>KSS 1566</td>
<td>Judo</td>
<td>4</td>
</tr>
<tr>
<td>KSS 1568</td>
<td>Taekwondo/Karate</td>
<td>3</td>
</tr>
<tr>
<td>KSS 2697</td>
<td>Camping</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1513</td>
<td>Algebra and Transcendental Function</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1500</td>
<td>Mathematics Preparation for Algebra Placement</td>
<td>2</td>
</tr>
<tr>
<td>MATH 1510</td>
<td>College Algebra</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1510C</td>
<td>Corequisite Support for College Algebra</td>
<td>2</td>
</tr>
<tr>
<td>MATH 2623C</td>
<td>Corequisite Support for Quantitative Reasoning</td>
<td>3</td>
</tr>
<tr>
<td>MATH 2651</td>
<td>Mathematics for Early Childhood Teachers</td>
<td>3</td>
</tr>
<tr>
<td>MATH 2651C</td>
<td>Corequisite Support for Mathematics for Early Childhood Teachers</td>
<td>4</td>
</tr>
<tr>
<td>STAT 2625</td>
<td>Statistical Literacy and Critical Reasoning</td>
<td>3</td>
</tr>
<tr>
<td>STAT 2625C</td>
<td>Corequisite Support for Statistical Literacy and Crit Reasoning</td>
<td>3</td>
</tr>
<tr>
<td>MATH 2623</td>
<td>Quantitative Reasoning</td>
<td>3</td>
</tr>
<tr>
<td>MSCI 1510</td>
<td>Introduction to ROTC</td>
<td>2</td>
</tr>
<tr>
<td>MSCI 1520</td>
<td>Introduction to Leadership</td>
<td>2</td>
</tr>
<tr>
<td>MSCI 1530L</td>
<td>Basic Course Leadership Laboratories</td>
<td>2</td>
</tr>
<tr>
<td>MUHL 2621</td>
<td>Music Literature and Appreciation</td>
<td>2</td>
</tr>
<tr>
<td>MUHL 2616</td>
<td>Survey of Jazz</td>
<td>3</td>
</tr>
<tr>
<td>PHLT 1531</td>
<td>Fundamentals of Public Health</td>
<td>3</td>
</tr>
<tr>
<td>PHLT 1568</td>
<td>Healthy Lifestyles</td>
<td>3</td>
</tr>
<tr>
<td>POL 1550</td>
<td>Introduction to Political Science</td>
<td>3</td>
</tr>
<tr>
<td>RSS 1510A</td>
<td>Advanced College Success Skills</td>
<td>2</td>
</tr>
<tr>
<td>RSS 1510C</td>
<td>STEM Advanced College Success Skills</td>
<td>2</td>
</tr>
<tr>
<td>SOC 1500</td>
<td>Introduction to Sociology</td>
<td>3</td>
</tr>
<tr>
<td>THTR 1560</td>
<td>Introduction to Theatre</td>
<td>3</td>
</tr>
<tr>
<td>THTR 1590</td>
<td>History of Motion Pictures</td>
<td>3</td>
</tr>
<tr>
<td>TCOM 1595</td>
<td>Media Literacy and Culture</td>
<td>3</td>
</tr>
<tr>
<td>Any college-based first year orientation course</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

A limited number of additional college-based courses are available with consultation with, and the expressed approval of, the student's college advisor.

Approved Courses for Conditionally Admitted Students

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFST 2600</td>
<td>Introduction to Africana Studies 1</td>
<td>3</td>
</tr>
<tr>
<td>AFST 2601</td>
<td>Introduction to Africana Studies 2</td>
<td>3</td>
</tr>
<tr>
<td>COUN 1587</td>
<td>Introduction to Health and Wellness in Contemporary Society</td>
<td>3</td>
</tr>
<tr>
<td>COUN 1589</td>
<td>Success in Career and Life Planning</td>
<td>3</td>
</tr>
<tr>
<td>CSIS 1500</td>
<td>Computer Literacy</td>
<td>3</td>
</tr>
<tr>
<td>ECON 1503</td>
<td>Rich and Poor: Diversity and Disparity in the United States Workplace</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 1550</td>
<td>Writing 1</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 1541</td>
<td>Introduction to College Writing</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 1549</td>
<td>Writing 1 with Support</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 1551</td>
<td>Writing 2</td>
<td>3</td>
</tr>
<tr>
<td>ENST 1500</td>
<td>Introduction to Environmental Science</td>
<td>3</td>
</tr>
<tr>
<td>ENST 1500L</td>
<td>Introduction to Environmental Science Lab</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 1500</td>
<td>Environmental Geology</td>
<td>4</td>
</tr>
<tr>
<td>GEOL 1500L</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>HAHS 1510</td>
<td>Investigations into Social Classes in America</td>
<td>3</td>
</tr>
<tr>
<td>HIST 1501</td>
<td>American Dreams: Introduction to United States History</td>
<td>3</td>
</tr>
<tr>
<td>KSS 1500</td>
<td>Physical Activity Core Concepts</td>
<td>3</td>
</tr>
<tr>
<td>KPS 1500 and any two of the following activity courses counts as 3 s.h. for the SPS Domain of the GER:</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>KSS 1502</td>
<td>Volleyball</td>
<td>3</td>
</tr>
<tr>
<td>KSS 1507</td>
<td>Volleyball 2</td>
<td>3</td>
</tr>
<tr>
<td>KSS 1510</td>
<td>Archery</td>
<td>3</td>
</tr>
<tr>
<td>KSS 1511</td>
<td>Badminton</td>
<td>3</td>
</tr>
<tr>
<td>KSS 1512</td>
<td>Bowling</td>
<td>3</td>
</tr>
<tr>
<td>KSS 1513</td>
<td>Bowling 2</td>
<td>3</td>
</tr>
<tr>
<td>KSS 1514</td>
<td>Fencing 1</td>
<td>3</td>
</tr>
<tr>
<td>KSS 1515</td>
<td>Fencing 2</td>
<td>3</td>
</tr>
<tr>
<td>KSS 1519</td>
<td>Racquetball</td>
<td>3</td>
</tr>
<tr>
<td>KSS 1520</td>
<td>Golf 1</td>
<td>3</td>
</tr>
<tr>
<td>KSS 1521</td>
<td>Golf 2</td>
<td>3</td>
</tr>
<tr>
<td>KSS 1522</td>
<td>Tennis</td>
<td>3</td>
</tr>
<tr>
<td>KSS 1523</td>
<td>Tennis 2</td>
<td>3</td>
</tr>
<tr>
<td>KSS 1524</td>
<td>Physical Fitness and Exercise Program</td>
<td>3</td>
</tr>
<tr>
<td>KSS 1526</td>
<td>Marksmanship</td>
<td>3</td>
</tr>
<tr>
<td>KSS 1528</td>
<td>Advanced Physical Fitness and Exercise Programs</td>
<td>3</td>
</tr>
<tr>
<td>KSS 1529</td>
<td>Recreational Games</td>
<td>3</td>
</tr>
<tr>
<td>KSS 1530</td>
<td>Learn to Swim</td>
<td>3</td>
</tr>
<tr>
<td>KSS 1531</td>
<td>Aquatics 2</td>
<td>3</td>
</tr>
</tbody>
</table>

Career-Technical Credit Transfer (CT) / CTAG

Secondary or adult students who successfully complete specified technical programs are eligible to have technical credit transfer to public colleges and universities. This transfer of credit is described in Career-Technical Assurance Guides (CTAG). Students are guaranteed the transfer of applicable credits among Ohio’s public colleges and universities and equitable treatment in the application of credits to admissions and degree requirements. (CT)² helps
more high school and adult career-technical students to go to college and enter with college credit; technical credit saves students money and time; and Ohio business and industry will benefit from more employees with higher education and advanced skills.

The language in section 3333.162 (http://regents.ohio.gov/careertechnicaltransfer/archives/documents/HB66Language.pdf) of the Ohio Revised Code requires the Ohio Department of Higher Education and the Ohio Department of Education to develop policies and procedures ensuring that students at an adult career-technical education institution or secondary career-technical education institution can transfer agreed upon technical courses completed there (that adhere to recognized industry standards) to any public institution of higher education "without unnecessary duplication or institutional barriers."

To access credit, students will need to request a CTAG Verification Form be sent by the career-institution from which they attended/graduated, to the YSU Office of College Tech Prep and Special Projects. Students have three years from high school graduation to apply for credit. For more information on how to access (CT)² credit visit the Ohio Department of Higher Education Career-Technical Credit Transfer (CT) (https://www.ohiohighered.org/transfer/ct2/how-to-access-ct2-credit/)² Verification of Course/Program Completion Form webpage.

**Transfer Applicants**

An applicant who has graduated from high school and was enrolled in another college or university for at least one course during the fall semester following high school graduation is classified as a transfer applicant. This classification includes post-baccalaureate applicants from other institutions seeking additional undergraduate coursework.

The Ohio Department of Higher Education in 1990, following a directive of the 119th Ohio General Assembly, developed the Ohio Articulation and Transfer Policy to facilitate students’ ability to transfer credits from one Ohio public college or university to another in order to avoid duplication of course requirements. A subsequent policy review and recommendations produced by the Articulation and Transfer Advisory Council in 2004, together with mandates from the 125th Ohio General Assembly in the form of Amended Substitute House Bill 95, have prompted improvements of the original policy. While all state-assisted colleges and universities are required to follow the Ohio Articulation and Transfer Policy, independent colleges and universities in Ohio may or may not participate in the transfer policy. Therefore, students interested in transferring to independent institutions are encouraged to check with the college or university of their choice regarding transfer agreements. In support of improved articulation and transfer processes, the Ohio Department of Higher Education (ODHE) has established a transfer clearinghouse to receive, annotate, and convey transcripts among state-assisted colleges and universities. This system is designed to provide standardized information and help colleges and universities reduce undesirable variability in the transfer credit evaluation process.

**ODHE Transfer Module**

The Ohio Department of Higher Education’s Transfer and Articulation Policy established the transfer module, which is a subset or entire set of a college or university’s general education curriculum in AA, AS, and baccalaureate degree programs. Students in applied associate degree programs may complete some individual transfer module courses within their degree program or continue beyond the degree program to complete the entire transfer module. The transfer module contains 36-40 semester or 54-60 quarter hours of course credit in:

- English composition (minimum of 3 semester or 5 quarter hours)
- Mathematics, statistics, and formal/symbolic logic (minimum of 3 semester or 3 quarter hours)
- Arts/humanities (minimum of 6 semester or 9 quarter hours)
- Social and behavioral sciences (minimum of 6 semester or 9 quarter hours)
- Natural Science (minimum of 6 semester or 9 quarter hours)
- Oral communication and interdisciplinary areas may be included as additional options to satisfy OTM requirements
- Additional elective hours from among these areas make up the total hours for a completed transfer module

Courses for the transfer module should be lower-division level general education courses commonly completed in the first two years of a student’s course of study. Each state-assisted university, technical, and community college is required to establish and maintain an approved transfer module. Transfer module course(s) or the full module completed at one college or university will automatically meet the requirements of individual transfer module course(s) or the full transfer module at another college or university once the student is admitted. Students may be required, however, to meet additional general education requirements at the institution to which they transfer. For example, a student who completes the transfer module at Institution S (sending institution) and then transfers to Institution R (receiving institution) is said to have completed the transfer module portion of Institution R’s general education program. Institution R, however, may have general education courses that go beyond its transfer module. State policy initially required that all courses in the Transfer Module be completed to receive its benefit in transfer. However, subsequent policy revisions have extended this benefit to the completion of individual transfer module courses on a course-by-course basis.

**ODHE Conditions for Transfer Admission**

1. Ohio residents with associate degrees from state-assisted institutions and a completed, approved transfer module shall be admitted to any state institution of higher education in Ohio, provided their cumulative grade point average is at least 2.0 for all previous college-level courses. Further, these students shall have admission priority over out-of-state associate degree graduates and transfer students.

2. When students have earned associate degrees but have not completed a transfer module, they will be eligible for preferential consideration for admission as transfer students if they have grade point averages of at least a 2.0 for all previous college-level courses.

3. In order to encourage completion of the baccalaureate degree, students who are not enrolled in an AA or AS degree program but have earned 60 semester or 90 quarter hours or more of credit toward a baccalaureate degree with a grade point average of at least a 2.0 for all previous college-level courses will be eligible for preferential consideration for admission as transfer students.

4. Students who have not earned an AA or AS degree or who have not earned 60 semester or 90 quarter hours of credit with a grade point average of at least a 2.0 for all previous college-level courses are eligible for admission as transfer students on a competitive basis.

5. Incoming transfer students admitted to a college or university shall compete for admission to selective programs, majors, and units on an equal basis with students native to the receiving institution.

Admission to a given institution, however, does not guarantee that a transfer student will be automatically admitted to all majors, minors, or fields of concentration at the institution. Once admitted, transfer students shall be subject to the same regulations governing applicability of catalog requirements as native students. Furthermore, transfer students shall be accorded the same class standing and other privileges as native students on the basis of the number of credits earned. All residency requirements must be completed at the receiving institution.

**Acceptance of Transfer Credit**

To recognize courses appropriately and provide equity in the treatment of incoming transfer students and students native to the receiving institution, transfer credit will be accepted for all successfully completed college-level courses from regionally accredited colleges and universities. Students who successfully complete AA or AS degrees with a 2.0 or better overall grade
point average would also receive credit for all college-level courses they have passed. (See Ohio Articulation and Transfer Policy, Definition of Passing Grade, Appendix D on the ODHE (https://www.ohiohighered.org/transfer/policy/) website.) While this reflects the baseline policy requirement, individual institutions may set equitable institutional policies that are more accepting.

Pass/fail courses, credit by examination courses, experiential learning courses, and other nontraditional credit courses that meet these conditions will also be accepted and posted to the student record.

See information for Transfer Students (http://www.ysu.edu/admissions/apply-to-ysu/transfer-students/) for related documents.

**Transfer Assurance Guides**

Transfer Assurance Guides (TAGs) comprise transfer module courses and additional courses required for an academic major. A TAG is an advising tool to assist Ohio university and community and technical college students planning specific majors to make course selections that will ensure comparable, compatible, and equivalent learning experiences across the state's higher education system.

A number of area-specific TAG pathways in the arts, humanities, business, communication, education, health, mathematics, science, engineering, engineering technologies, and the social sciences have been developed by faculty teams. TAGs empower students to make informed course selection decisions and plans for their future transfer. Advisors at the institution to which a student wishes to transfer should also be consulted during the transfer process.

Students may elect to complete the full TAG or any subset of courses from the TAG. Because of specific major requirements, early identification of a student's intended major is encouraged. TAG courses count toward the major without adding to the overall total of credits in the particular major.

Students should also check with their department about which courses have received approval from ODHE as part of the Transfer Assurance Guides program. Only those courses that have received such approval can be guaranteed transfer credit as part of the major. Students may also check with the ODHE TAG (https://www.ohiohighered.org/transfer/tag/) website.

**Transferring to YSU**

**Transfer Credit**

Transfer credit is given for all coursework taken at a regionally accredited institution, provided that the student has a cumulative grade point average equivalent to 2.0 (on a 4.0 system). Cumulative GPA includes work from all previous institutions. Earned credits transferring into YSU will apply to one of three areas including general education, major coursework, or elective credit. Developmental/remedial courses do not apply toward any degree at YSU. YSU accepts a "D" grade on the same basis as the rules governing native students. For example, a "D" grade might not satisfy a prerequisite for which a higher grade is needed. Courses from nonregionally-accredited institutions may be accepted on a case-by-case basis with the approval of the chair of the department and the dean of the college in which the course would be housed at YSU.

Conditions for transfer admission to the University are in line with ODHE rules and regulations (see above). Per ODHE policy, the University recognizes the associate degree as preliminary to the baccalaureate and admits advanced-standing students possessing the associate degree from a regionally accredited institution. Transfer credit is granted for all work successfully completed from the associate degree. Admission to the University does not guarantee that a transfer student will be automatically admitted to all majors, minors, or fields of concentration. Some programs within the University have separate admission standards that must be met before a student may enroll in that particular program. Please consult the appropriate college or department for information on restricted program admissions. Once admitted, transfer students shall be subject to the same regulations governing applicability of catalog requirements, class standing, and other privileges as all other native students.

Transfer applicants who are in good standing at the last institution attended and who have a cumulative grade point average of 2.0 or higher (on a 4.0 system) for all previous college-level courses are admitted in good standing. Transfer applicants with a cumulative grade point average of less than 2.0 or who are on probation, may be considered on a case by case basis. Applicants suspended or dismissed from their most recent institutions are not eligible for admission until at least one semester (excluding summer) has passed following the term in which the suspension occurred. Transfer students with multiple suspensions or dismissals may not be eligible for admission. See the reinstatement policy for YSU students (http://www.ysu.edu/academic-advising/policies-procedures/) in the Undergraduate Catalog. Consistent with undergraduate academic policy, failure to maintain a grade point average of 2.0 or higher (on a 4.0 system) during the probationary semester will result in academic suspension.

The university is continuing the process of examining all courses from surrounding collegiate institutions. The Office of Degree Audit along with the department chairs and the coordinator of General Education work with the Office of Admissions to identify courses that equate or courses that could count toward a major or general education credit. The appropriate school or college and/or department and/or coordinator of general education in accordance with policies governing the fulfillment of degree requirements will determine distribution of any accepted course work.

**Credentials for Transfer Students**

Official transcripts may be sent directly from the issuing institution to the YSU Office of Admissions or can be delivered in person in a sealed and stamped envelope. The Ohio Department of Higher Education has established a transfer clearinghouse to receive, annotate, and convey transcripts among state-assisted colleges and universities. Official transcripts may also be sent electronically through a secured provider (e.g. Parchment, eScrip-Safe, National Student Clearinghouse, etc.)

**Pre-baccalaureate**

All transfer applicants are required to submit all undergraduate transcripts from regionally accredited colleges and universities attended. Official high school transcripts are also required to be submitted unless a student has earned an associate degree. All transcripts should be sent to YSU's Office of Admissions.

**Post-Baccalaureate**

Post-baccalaureate applicants are required to submit all undergraduate transcripts from regionally accredited colleges and universities attended. High school transcripts are not required unless specifically requested by YSU.

**Prior Learning Assessment Credit**

Prior Learning Assessment (PLA) is an option that enables students to demonstrate what they have learned outside the classroom and translate that learning into college credit. Prior Learning Assessment validates learning acquired through corporate training programs, extensive volunteer activity, military service, workplace experience, civic engagement, individual readings and studies, training sponsored by professional organizations, and training sponsored by governmental agencies. Credit is awarded for college-level learning (knowledge, skills, and competencies) that students have obtained as a result of their prior learning experiences.

Students must demonstrate their mastery of the knowledge in a subject area in order to earn college credit. Prior learning can be verified by:

- Performance on standardized tests or department challenge exams
- Creation and evaluation of a portfolio
- Demonstration of military service learning

For more information regarding PLA credit and guidelines, please see the Prior Learning Assessment (https://www.ysu.edu/prior-learning-assessment/) website.
General Education and the Transfer Module

1. Per the articulation and transfer module guidelines developed by the Ohio Department of Higher Education, any student transferring to YSU with a completed transfer module from another Ohio public institution of higher learning will receive credit for all hours (36-40 semester hours; 54-60 quarter hours) contained within the module. Furthermore, the transfer module portion of YSU’s General Education Requirements will be judged to be completed.

2. Students transferring into YSU with the OTM completed at another institution will have all general education courses completed with the exception of 2 courses under Social and Personal Awareness (6 semester hours) and the capstone course (3 semester hours). Students may find a list of approved capstone courses on the General Education website (p. 51).

3. For those students who have not completed the transfer module at another school, ODHE has guaranteed that any approved transfer module course taken at one institution must receive general education credit at the receiving institution. YSU has also determined that courses beyond the OTM list may satisfy general education requirements. The Office of Degree Audit will process equates between the transferred and YSU courses. The General Education Committee will determine which courses being transferred fit within the YSU general education model. The student will then be advised as to how many courses in each domain must be taken to satisfy the general education requirements at this university. Each student must complete a capstone course at Youngstown State University.

Transfer from a Regionally Accredited Institution-Articulation Agreements

YSU also has a number of articulation agreements with colleges in Ohio and western Pennsylvania. Through these agreements a maximum number of credits from the associate-degree-granting institution will be applied toward a bachelor’s degree program at YSU. Associate-degree holders meeting that criterion will, in most cases, be admitted with junior standing at Youngstown State and entitled to all the rights and privileges of native junior students, including eligibility for financial aid and priority in registration. Please refer to the Degree Audit (http://ysu.edu/degree-audit/) website for more information and for a current list of articulation agreements.

The University also has articulation agreements with many career and technical centers to award college credit for various courses. For a complete list of these agreements, refer to the Degree Audit website under Partnership Program Information 2 and 4 Year Agreements with other Institutions.

Articulation agreements are pending with several other institutions in the region. Applicants who have not completed an associate program are considered on the same basis as other transfer applicants.

Transferring From YSU

In order to facilitate transfer with maximum applicability of transfer credit, prospective transfer students should plan a course of study that will meet the requirements of a degree program at the receiving institution. Students should use the Transfer Module (see below), Transfer Assurance Guides (https://www.ohiohighered.org/transfer/tag/), and the Transferology (https://www.transferology.com/) system for guidance in planning the transfer process. Specifically, students should identify early in their collegiate studies an institution and major to which they desire to transfer. Furthermore, students should determine if there are language requirements or any special course requirements that can be met during the freshman or sophomore year. This will enable students to plan and pursue a course of study that will articulate with the receiving institution’s major. Students are encouraged to seek further information regarding transfer from the college or university to which they plan to transfer.

YSU Transfer Module

Based on ODHE guidelines, students wishing to transfer to another state college or university can complete the general education transfer module by taking the following:

- English 1550 Writing I, English 1551 Writing II (6 semester hours)
- Mathematics, statistics, and logic (3 semester hours)
- Oral Communications (3 semester hours)
- Natural Science (must include one laboratory science, minimum of 7 semester hours)
- Arts and Humanities (minimum of 6 semester hours)
- Social Science (minimum of 6 semester hours)

It is recommended that students take a minimum of six of the hours from Natural Science, Arts and Humanities, or Social Science from courses that are cross-listed as Social and Personal Awareness. In doing so, a student can still complete YSU’s General Education Requirements in a timely manner should that student choose not to transfer.

No course may count unless it is on the 1500 or 2600 level. The student must take the minimum credits in each category and at least 36 credits overall to complete the transfer module. However, each course approved as part of a university’s Transfer Module is guaranteed credit at another state institution as a general education course.

Students planning to transfer from YSU should refer to the Undergraduate Catalog (General Education Courses by Knowledge Domain) for a list of general education courses approved as part of the transfer module. Only those courses footnoted will receive general education credit. This information will also be available on the General Education (p. 51) website, which is linked to the YSU homepage.

Advanced Placement (AP)

The state of Ohio, working through the University System of Ohio, has initiated policies to facilitate the ease of transition from high school to college as well as between and among Ohio’s public colleges and universities.

Beginning in the fall term 2009:

1. Students obtaining an Advanced Placement (AP) exam score of 3 or above will be awarded the aligned course(s) and credits for the AP exam area(s) successfully completed.

2. General education courses and credits received will be applied towards graduation and will satisfy a general education requirement if the course(s) to which the AP area is equivalent fulfill a requirement.

3. If an equivalent course is not available for the AP exam area completed, elective or area credit will be awarded in the appropriate academic discipline and will be applied towards graduation where such elective credit options exist within the academic major.

4. Additional courses or credits may be available when a score of 4 or 5 is obtained. Award of credit for higher score values varies depending on the institution and academic discipline.

5. In academic disciplines containing highly dependent sequences (mathematics, sciences, etc.), students are strongly advised to confer with the college/university advising staff to ensure they have the appropriate foundation to be successful in advanced coursework within the sequence.

CLEP (College Level Placement Test), Departmental Credit By Exam

1. Students may not take a CLEP test, department challenge exam, or other credit by exam opportunity for any course in which they are currently enrolled or have been previously enrolled and earned an evaluative grade.

2. Students who have already received credit for coursework for a subject in which the courses are sequential may not receive academic credit.
by means of CLEP department challenge exam, or other credit by exam opportunity for an earlier prerequisite course.
3. Students pursuing a baccalaureate degree may earn up to a maximum total of 30 semester hours via credit by exam; an associate degree may earn a maximum total of 15 semester hours via credit by exam.

Appeals
A student who disagrees with the award of transfer credit by the receiving institution has the right to appeal the decision and should contact the Office of Degree Audit to begin the process. The institution will make the student aware of the entire appeal process at the time of contact. You can also visit the Appeal (http://www.ysu.edu/admissions/apply-to-ysu/transfer-students/) website for an explanation of the process.

Tuition, Fees, and Charges
Tuition and fees are assessed based on the number of credit hours of enrollment, residency, course and/or program. The Board of Trustees of Youngstown State University has pledged to make every effort to keep the required fees as low as is consistent with providing quality education. It is intended that fees not be adjusted more often than annually and that fee changes be announced in the spring or early summer. The Board of Trustees does, however, reserve the right to change any fee, charge, or fine without notice if conditions warrant.

Application for Involuntary Withdrawal
If a student withdraws for reasons beyond his or her control (e.g., illness, military service, job transfer, or shift change imposed by the employer that creates a direct conflict with the class schedule), the fee charges may be reduced in proportion to the number of weeks enrolled, upon submission and approval of an Application for Involuntary Withdrawal.

An Application for Involuntary Withdrawal can be processed only for courses in which the student has already received a grade of "W" (withdrawn). Applications for involuntary withdrawal will be considered only for semesters falling within the immediately preceding one-year time period (3 semesters). Appeals pertaining to semesters beyond this one-year time limit will not be accepted. All applications for involuntary withdrawal must be documented. Applications are processed only by mail on forms provided by Office of University Bursar. Address such correspondence to:

Fees and Charges Appeals Board
C/o Office of University Bursar
Youngstown State University
One University Plaza
Youngstown, OH 44555

The decision of the Board is final and not subject to re-appeal.

Billing
Student accounts are billed each semester (bills will be issued approximately the 15th of July for the Fall semester and the 15th of December for the Spring semester, and payments are due approximately the 10th of the following month respectively). Go to Online Programs (https://online.ysu.edu/) for information on billing for online programs. ALL tuition statements will be issued electronically and must be viewed online. Paper bills are never mailed. If you need a paper copy of your statement, you may print it directly from the Penguin Portal. An e-mail notice that the bill is online for your review will be sent, to the student and all authorized users, each time a new statement is released as well as each time account activity alters a payment plan balance. This statement, as well as all subsequent tuition statements, will also be available online for your review via the Penguin Portal (https://penguinportal.ysu.edu/).

Go to View My Bill (https://my.ysu.edu/cp/home/displaylogin?goto=https%3A/my.ysu.edu/cp/ip/login%3Fsays%3Dscsbb&amp;url=https%3A/scsbb.admin2.ysu.edu%3A8443/pls/PRODS/zwkntnet.P_Redirect%3FFormTarget%3D_self) and log in to view statements, make online payments, enroll in payment plan, establish an authorized user, view holds, and select tax information.

YOU ARE STRONGLY ENCOURAGED TO PAY YOUR BILL ONLINE AT YSU.EDU/VIEWMYBILL.
You may also make payment:

* in person at the payment windows on the second floor of Meshel Hall. Cashier Hours are Monday through Friday 10:00 a.m. - 2:00 p.m. or

* via the payment drop box also located on the second floor of Meshel Hall (check only, no cash) or

* by mail to: Youngstown State University, Attention Office of University Bursar, One University Plaza, Youngstown, OH 44555 (check only, please do not mail cash). Please make checks payable to Youngstown State University.

You may pay online by echeck (no additional charge) or with Visa, MasterCard, or Discover. There is a 2.85% convenience fee, minimum of $3.00, for payments made by credit card.

If you deliver a check in person, mail it, or place it in the payment drop box, you authorize us to convert that check to an electronic Automated Clearing House (ACH) transaction. That check will then appear on your monthly bank statement as an Electronic Debit. If you do not wish to have your paper check converted to an ACH, you must present it in person or select an alternative payment method (for instance, credit card).

Your enrollment at the University creates a contract between you and YSU. If you choose not to attend the University, you must officially withdraw from all courses in accordance with the published tuition refund schedule at University Bursar Tuition Refund Policy (https://ysu.edu/university-bursar/tuition-refund-policy/) to receive 100% refund or reduction of charges. All days of the week are counted, including weekends and holidays. Please be advised that all University offices are not open on weekends and holidays; thus, online withdrawal may be required.

If you decide to withdraw from the University once you have enrolled, you must access the registration functions through the Penguin Portal.

Students may choose to opt-out of the First Day Ready electronic materials charge by contacting the Office of University Bursar and completing an opt-out form. The deadline for opting out of a First Day Ready electronic materials charge is the same as the 100 percent refund period for tuition as posted in the published tuition refund schedule at University Bursar Tuition Refund Policy (https://ysu.edu/university-bursar/tuition-refund-policy/). For additional information go to First Day Ready Electronic Materials Opt-Out Process (https://ysu.edu/university-bursar/opt-out-process/).

You may also enroll in a payment plan, for current term charges, through the Penguin Portal. Payment plan enrollment must be processed online and requires an initial payment at the time of enrollment. There is a fee for enrollment in the payment plan, and late payments are subject to late payment fee assessment. All tuition balances are due in full by the due date unless you enroll online in an authorized payment plan. Please note, if your balance is not paid in full by the due date, or you have not enrolled online in the payment plan, your account will be subject to late payment fee assessment. Payment plan enrollment is not available for the online RN-BSN program.

Students may designate another individual as an "authorized user(s)" by going to ysu.edu/view mybill, log in, and click on Authorized Users on the right side of the page. Follow the instructions to set up an authorized user. Once an authorized user has been set up by the student, that individual will also have
Please be advised that failure to read e-mail, or regularly review your student account online, does not relieve a student of the responsibility to make on-time payment in the correct amount. Any adjustment to your student account (increase and/or decrease) due to registration changes, changes in financial aid awards, assessment of late fees, fines or penalties, or any other transaction will be immediate and will be reflected (after 8:00 am on the following business day) in all remaining balances due, including unpaid payment plan installments. Your account can be reviewed at any time by accessing your online account via the ysu.edu/viewmybill link.

Students are solely responsible for timely payment of their tuition and fees. In the event that the account becomes past due, the University reserves the right to withhold services (e.g., transcripts, diplomas, registration, and other University services) until the past-due balance is paid in full. If full payment cannot be obtained, then the delinquent balance must be turned over to the Ohio Attorney General’s Collection Enforcement Office for collection and it will be reported to the Credit Bureau. Once an account becomes delinquent, the student will be required to pay in advance of registering for at least one subsequent term. An account turned over to the Attorney General will incur interest and collection expenses which must be paid before any of the adverse sanctions can be removed.

Questions regarding billing and/or payment of fees should be directed to the Office of University Bursar at (330) 941-3133, or in person at Room 227, Meshel Hall. Any payments received via the online payment website will be applied to the oldest charges first. Please note that the University reserves the right to change any fee at any time, without notice, by action of the University Board of Trustees.

### Payment of Tuition and Fees

Student accounts are billed each semester. Tuition statements are sent out electronically, and an e-mail is sent each time a bill is issued. Current account information – including charges, payments, and refund amounts – is available online at ysu.edu/viewmybill. Tuition statements may also be printed from this site.

Students are expected to have their student accounts in a paid status prior to attending the first class meeting for a term. In order to have a student account in a “paid status,” students must be either paid in full for the term or officially signed up and paid the first payment on the approved payment plan. Payment plan enrollment is not available for the online RN-BSN program. Late and/or partial payments are subject to late payment fee assessment.

**You are strongly encouraged to pay your bill online at YSU.EDU/VIEWMYBILL.**

You may also make payment:

- *in person at the payment windows on the second floor of Meshel Hall. Cashier Hours are Monday through Friday 10:00 a.m. - 2:00 p.m. or*
- *via the payment drop box also located on the second floor of Meshel Hall (check only, no cash) or*
- *by mail to: Youngstown State University, Attention Office of University Bursar, One University Plaza, Youngstown, OH 44555 (check only; please do not mail cash). Please make checks payable to Youngstown State University.*

You may pay online by echeck (no additional charge) or with Visa, MasterCard, or Discover. There is a 2.85% convenience fee, minimum of $3.00, for payments made by credit card.

If you deliver a check in person, mail it, or place it in the payment drop box, you authorize us to convert that check to an electronic Automated Clearing House (ACH) transaction. That check will then appear on your monthly bank statement as an Electronic Debit. If you do not wish to have your paper check converted to an ACH, you must present it in person or select an alternative payment method (for instance, credit card).

A payment plan is also available that will allow you to spread your payments out over a longer period. Payment plan enrollment must be processed online and requires an initial payment at the time of enrollment. There is a fee for enrollment in the payment plan, and late payments are subject to late payment fee assessment. Payment plan enrollment is not available for the online RN-BSN program.

### Penguin Tuition Promise

The YSU Penguin Tuition Promise is a cohort-based, level-rate tuition, room and board, and fee guarantee model that assures a student and his/her family a set of fixed rates for the pursuit of an undergraduate degree at Youngstown State University. The Penguin Tuition Promise is designed to make the cost of college predictable and affordable. Beginning with the 2018-2019 academic year, every new first-year, transfer, or re-admitted degree-seeking undergraduate student will be part of the Penguin Tuition Promise. For additional information visit the YSU Penguin Tuition Promise (https://ysu.edu/ysu-penguin-tuition-promise/) page.

Tuition and fees are assessed based on the number of credit hours of enrollment, residency, course, and/or program. The Board of Trustees of Youngstown State University has pledged to make every effort to keep the required fees as low as is consistent with providing quality education. It is intended that fees not be adjusted more often than annually and that fee changes be announced in the spring or early summer. The Board of Trustees does, however, reserve the right to change any fee, charge, or fine without notice if conditions warrant.

### Penguin Tuition Promise Description of Fees

The Board of Trustees of Youngstown State University has pledged to make every effort to keep the required fees as low as is consistent with providing quality education. It is intended that fees not be adjusted more often than annually and that fee changes be announced in the spring or early summer. The Board of Trustees does, however, reserve the right to change any fee, charge, or fine without notice if conditions warrant.

### Fees

**INSTRUCTIONAL FEE**

This fee is assessed to all penguin tuition promise students each term. This fee supplements the state subsidy and is a source of revenue for the University’s educational and general fund.

**GENERAL FEE**

This fee is for non-instructional services such as Kilcawley Center, intercollegiate athletics, intramural sports, performing artists and lecture programs, and student government.
NON-RESIDENT TUITION SURCHARGES
Those students who are not legal residents of Ohio must pay a surcharge in addition. Students who are residents of the Affordable Tuition Advantage area pay a lesser surcharge than do students who are legal residents of other states and/or areas. The Affordable Tuition Advantage area includes the counties of Allegheny, Armstrong, Beaver, Butler, Clarion, Crawford, Erie, Fayette, Forest, Greene, Indiana, Jefferson, Lawrence, Mercer, Venango, Warren, Washington and Westmoreland counties in Pennsylvania; Chautauqua County in New York; and Brooke, Hancock, Marshall, and Ohio counties in West Virginia.

AUDITED COURSES
Students may audit courses (i.e., register to take a course without receiving credit). The fee for auditing a course is the same as if the course were taken for credit.

College Fee
This fee is designed to recognize the differential cost of instruction among colleges. Examples of use include research instrumentation, enhanced teaching equipment, specialized software, specialized information resources (databases), maintenance and repair of capital equipment, technical and laboratory personnel support, and lab and instructional space upgrades.

COURSE BOOK AND SUPPLY FEE
This fee represents the cost for electronic materials such as eBooks that are used in designated course(s). This fee is non-refundable after the 100% tuition refund period and cannot be appealed.

COURSE FEE
This fee is designed to partially offset expenses associated with courses that make use of supplies, equipment or personnel support beyond that associated with typical lecture courses. Examples include chemical supplies, engineering equipment, computers, software, and lab monitors. In addition, the Student Success Course Fee is designed to partially offset expenses associated with Campus Sexual Violence Elimination (SaVe) Act training, Financial Aid materials and training sessions with Financial Aid, content and programming for a common intellectual experience including speakers and campus-wide events, other materials, handouts, and software related to common elements of first-year experience courses.

CREDIT BY EXAMINATION FEE
A fee is charged for each course for an individual examination provided by an academic department to determine whether a student can be given academic credit for his or her knowledge of the course material. The fee must be paid before the test can be taken. This fee is charged on a per-credit basis.

DISTANCE EDUCATION LEARNING FEES
This fee is to offset the cost of technology and support needed to support online programs.

Graduation Fee
This nonrefundable fee is assessed when students apply to graduate to cover costs associated with graduation. If a student defers graduation and has paid the fee, the payment remains valid for the two academic terms following the term of application. Should a student graduate with more than one degree at a time, the fee will only be charged once.

HONORS COLLEGE FEE
This fee supports student learning objectives within the five pillars of the Honors College. Some of the programs and activities supported by this fee are the Honors College Retreat, Academic Journal, student research, student presentations, annual showcase, and volunteer and community service projects. Additionally, the fee serves as a source to staff programs and equip buildings with technology to foster and support educational development and student success.

INTERNATIONAL STUDENT CREDENTIAL EVALUATION FEE
The International Programs Office (IPO) is responsible for evaluating credentials from applicants earned at foreign high schools and universities. This fee supports the evaluation of those credentials including professional development of staff in this area. Each graduate applicant who submits credentials to be evaluated by IPO staff will be assessed this fee.

INTERNATIONAL STUDENT HEALTH INSURANCE FEE
Per YSU policy, all international students who attend YSU on an F-1 or J-1 visa and who are not sponsored by a government-related organization, are required to purchase Health Insurance. International students will be assessed this fee on their student account. YSU transfers the fee to the insurance company to provide health insurance for the individual student. The rates are set by the insurance company; therefore, the fee is variable and may change from year-to-year.

INTERNATIONAL STUDENT PROGRAM FEE
The International Programs Office (IPO) is responsible for providing pre-admission advising and a wide array of student services unique to the international student population. This fee will support expenses related to pre-admission advising including technology support, travel, mailing and related expenses and international student services including providing appropriate academic advising to applicants, supporting immigration advising, supporting staff professional development related to immigration regulations and admission, and providing a range of general student support services including orientation, airport pickup and international activities. Each international student who is classified as either an undergraduate or graduate student will be assessed this fee.

LATE ADD FEE
Late adds will be granted on an exceptional basis only and there will be a late-add fee assessed for each course added after the add deadline. This fee is nonrefundable and cannot be appealed.

LATE APPLICATION FOR GRADUATION
Application for Graduation must be submitted within the first three weeks of the term. Applications submitted after this date will be assessed a non-refundable late fee.

LATE PAYMENT FEES
Payment of a bill received after the due date results in assessment of a late payment fee. All fees and charges billed must be paid in full. Partial payments will result in assessment of a late fee. Payment plan participants who do not pay their scheduled payment amount by the due date are also subject to assessment of a late payment fee.

LATE REGISTRATION FEE
A fee is charged a currently enrolled student who fails to register for the next term at the assigned time and later registers at the time assigned new or returning students.

NCAA PERMISSIBLE EXPENSES
This fee is for approved NCAA expenses such as meals incidental to participation, approved housing costs and fees, missed appointment charges, and other NCAA approved costs or charges.

PARKING permit (OPTIONAL)
This fee is optional each term for penguin tuition promise students and will also allow the student to have unlimited access to shuttle service. The Daytime parking permit will grant access to approved lots from 7:00 a.m. to 11:00 p.m. The Overnight parking permit will grant access to approved lots without any time restrictions. This fee is charged, upon request of the parking permit via Penguin Portal. The fee supports the operating and maintenance costs of campus parking facilities, roadways and sidewalks, as well as student shuttle service. The fee does not guarantee an available space in any
Following are the services below:

Mercy Health Wick Primary Care at YSU is located on the corner of Wick and Lincoln Avenue. The Center provides health care to all currently enrolled YSU students – both resident and commuter students. These services are provided because of the Health Center Fee that is paid by all students each semester. The Center will be staffed by a full-time pharmacist, a full-time nurse practitioner, and other medical personnel. The mandatory fee provides revenue to Mercy Health System to give student access to their Primary Care Facility. The center will be staffed by a full-time primary care physician and advanced practice provider. It will also provide the following services below:

- Full service primary care practice
  - Establish and develop continuity of care
  - Address acute issues
  - Walk-In Care location for non-scheduled visits
  - Preventative care
  - Extended hours
  - Lab draw site

- Mental health services
  - Mental health, behavioral health and addiction issues addressed
  - Two half-days per week
  - Psychiatrist

Health care is available for illness, injury, first aid, and routine health checks. Health screening tests, physical exams for sports and academic programs, gynecological exams, as well as consultations and referrals, are provided. Flu and other immunizations are also given; however, there are charges for these injections.

Office visits are free. Students do not need to have health insurance to use the Center’s services. Blood tests, x-rays, lab tests, etc., ordered by a physician are done off campus at the student’s choice of provider and at the student’s expense.

Student records are kept strictly confidential. Information cannot be released to anyone without the written consent of the student. Certain public health diseases, however, must be reported to the Department of Health as required by law.

For more information, visit Student Health Clinic (https://urldefense.proofpoint.com/v2/url?u=https-3A__na01.safelinks.protection.outlook.com_-3Furl-3Dhttp-253A-252F-252Fcc.ysu.edu-252Fstudent-2Dservices-252Fhealth-252FHealth-Clinic-252FHealth-Clinic-252F2-26reserved-3D0&d=DwMGaQ&c=0W9Vy5nnhl9u_frqx4vrzKSNz08jjO3fIve6wVqRTVo&r=Rw57s- bET0zrhs2k&m=8kacwib7CMOxXMiqCM8guVkdKMmjLNiLaXeQzIQG2Rs&e=).

**TESTING FEES**
The University Office of Testing supervises a variety of special tests used for admission to college, graduate, or professional schools. The fees are established by the agencies responsible for the tests. Students are advised to contact the Testing Office for information and to make reservations.

**Service Charges**

**COMPUTER-BASED PLACEMENT RE-TEST FEE**
A nonrefundable fee is charged each time a computer-based placement test is retaken.

**DATA RECOVERY SERVICE FEE**
Fee assessed to recover data and/or transfer data that was successfully recovered onto a media device provided by the students (i.e. flash drive, hard drive, or DVD). No fee assessed unless some or all of the data is recovered.

Note: If it is necessary to remove the hard drive from the PC in order to recover data, the IT Service Desk will NOT be able to perform the service, and no fee will be charged to the student.

**HEALTH CENTER FEE**
Mercy Health Wick Primary Care at YSU is located on the corner of Wick and Lincoln Avenue. The Center provides health care to all currently enrolled YSU students – both resident and commuter students. These services are provided because of the Health Center Fee that is paid by all students each semester. The mandatory fee provides revenue to Mercy Health System to give student access to their Primary Care Facility. The center will be staffed by a full-time primary care physician and advanced practice provider. It will also provide the following services below:

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  - Establish and develop continuity of care
  - Address acute issues
  - Walk-In Care location for non-scheduled visits
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  - Extended hours
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- Mental health services
  - Mental health, behavioral health and addiction issues addressed
  - Two half-days per week
  - Psychiatrist

Health care is available for illness, injury, first aid, and routine health checks. Health screening tests, physical exams for sports and academic programs, gynecological exams, as well as consultations and referrals, are provided. Flu and other immunizations are also given; however, there are charges for these injections.

Office visits are free. Students do not need to have health insurance to use the Center’s services. Blood tests, x-rays, lab tests, etc., ordered by a physician are done off campus at the student’s choice of provider and at the student’s expense.

Student records are kept strictly confidential. Information cannot be released to anyone without the written consent of the student. Certain public health diseases, however, must be reported to the Department of Health as required by law.

For more information, visit Student Health Clinic (https://urldefense.proofpoint.com/v2/url?u=https-3A__na01.safelinks.protection.outlook.com_-3Furl-3Dhttp-253A-252F-252Fcc.ysu.edu-252Fstudent-2Dservices-252Fhealth-252FHealth-Clinic-252FHealth-Clinic-252F2-26reserved-3D0&d=DwMGaQ&c=0W9Vy5nnhl9u_frqx4vrzKSNz08jjO3fIve6wVqRTVo&r=Rw57s- bET0zrhs2k&m=8kacwib7CMOxXMiqCM8guVkdKMmjLNiLaXeQzIQG2Rs&e=).

**HOUSING CHARGES**
On-campus housing is available for students year-round. The academic year contract covers room, board, and basic meal plan costs for both fall and spring semesters, as well as University breaks during both semesters (not including the break between semesters). Students may also apply separately for off-campus housing for summer terms. Charges are billed each semester. All payment dates and cancellation fees are outlined in the housing contract, which is included in full in the housing application and on the housing website. Please note that there is a housing application fee, as well as a housing prepayment, which will reserve the student a space. Students who are living off-campus may also choose to buy a meal plan at the Penguin Crossing in Kilcawley Center.

**IDENTIFICATION CARD REPLACEMENT CHARGE**
A nonrefundable charge is made for replacement of an ID card.

**INTERNATIONAL STUDENT ACTIVITIES FEE**
The International Programs Office (IPO) arranges social and cultural activities of cross-cultural nature. IPO may charge a nominal fee in order to defray the cost of such activities.

**INTERNATIONAL STUDENT STORAGE FEE**
The International Programs Office (IPO) arranges for international students to have access to secure storage for their belongings over the summer break. International students who wish to store their belongings are assessed this fee per box.
INTERNATIONAL STUDENT TRANSPORTATION FEE
The International Programs Office (IPO) arranges transportation at the end of each semester to the airport. Students who wish to reserve a space on the airport shuttle are assessed this fee. The intent of this fee is to defray the costs associated with providing transportation services.

PAYMENT PLAN ENROLLMENT FEE
A nonrefundable fee is charged for enrollment in the payment plan. All tuition and fees are due in full by the payment due date unless the student enrolls in the payment plan.

PC REMEDIATION SERVICE FEE
Fee assessed for removal of all spyware and viruses from the PC and for installing the most current updates to applications and the operating system to help reduce the risk of future attacks. The first two PC remediation services are provided free of charge to current YSU students; the fee only applies to remediation performed beyond the first two free services.

PHYSICAL EDUCATION ACTIVITY CHARGE
Certain activity courses (e.g. bowling, skiing, ice skating, scuba diving) are available only upon the payment of a charge sufficient to cover the cost of the facility or transportation. These charges are set by the operator of the facility, are paid by the student to that operator (not to the University), and are in addition to any other applicable fee.

PLACEMENT & SUPERVISION FEE FOR OVERSEAS STUDENT TEACHING
Through the Consortium for Overseas Student Teaching (COST), teacher candidates are placed in public and private institutions in various locations around the world where English is the language of instruction. YSU students who student teach overseas through COST will be charged a placement and supervision fee. The fee is established by COST and the entire amount is paid to them for the administration of the program. The fee amount varies and may be higher in some overseas sites.

RETURNED CHECK, ACH (ELECTRONIC CHECK), OR CREDIT CARD CHARGE
A charge is levied on anyone whose check, ACH, or charge is returned unpaid by the bank. If any late payment results therefrom, the applicable fee is also assessed. Failure to pay billing of return check, ACH, and/or charge within six days; and/or a second check, ACH, or charge return will result in the University not accepting this type of payment at any of its collection points and may subject the student to financial suspension for the term.

STUDENT LOCKER RENTAL
A limited number of lockers are available in various buildings for the convenience of commuting students. Locker payments and assignments are made in Kilcawley Center at the Penguin Xing.

TRANSCRIPT OF CREDITS CHARGE
There is a charge for normal transcript processing requests as well as rush or overnight express requests issued by the Office of Records. Transcripts will not be issued for anyone with outstanding debts owed to the University.

Fines

LIBRARY FINES
Fines are assessed for failure to return books on time as stipulated or for the unauthorized removal of a reserved book. Willful damage or defacement of library materials or other property is a violation of state law and is punished as such.

PARKING VIOLATION FINE
Parking without a permit, parking in unauthorized areas and other offenses as identified in the Parking Regulations brochure will result in the issuance of a citation against the vehicle and its owner, or against the student responsible for the vehicle (e.g., a student driving a parent’s car). Payment of a fine removes the citation. In certain cases, vehicles may be towed. See the regulations (https://cms.ysu.edu/administrative-offices/parking-services/rules-regulations/) for detailed information.

STUDENT CODE OF CONDUCT VIOLATION
Fines may be assessed to students who have violated The Student Code of Conduct. These fines can be assessed by the Student Conduct Administrator or the Student Conduct Board after a disciplinary hearing. For additional information regarding student conduct fines, please contact the Student Conduct office at 330-941-4704.

Penguin Tuition Promise Rates
Student Fees and Charges

Effective Fall 2020

TUTION

INSTRUCTIONAL FEE
Undergraduate Penguin Promise Tuition - FY 2021 Cohort 3
1 to 11 credits $308.37 per credit hour
12 to 18 credits $3,700.44 per semester
Over 18 credits $308.37 per credit hour

Undergraduate Penguin Promise Tuition - FY 2020 Cohort 2
1 to 11 credits $296.22 per credit hour
12 to 18 credits $3,554.64 per semester
Over 18 credits $296.22 per credit hour

Undergraduate Penguin Promise Tuition - FY 2019 Cohort 1
1 to 11 credits $286.20 per credit hour
12 to 18 credits $3,434.40 per semester
Over 18 credits $286.20 per credit hour

Undergraduate Online Programs (not eligible for payment plan enrollment)

RN-BSN $350.00 per credit hour

GENERAL FEE
Note: Does not apply to Online Programs

Undergraduate Penguin Promise Tuition - FY 2021 Cohort 3
1 to 11 credits $91.15 per credit hour
12 to 18 credits $1,093.80 per semester
Over 18 credits $91.15 per credit hour

Undergraduate Penguin Promise Tuition - FY 2020 Cohort 2
1 to 11 credits $87.56 per credit hour
12 to 18 credits $1,050.72 per semester
Over 18 credits $87.56 per credit hour
<table>
<thead>
<tr>
<th>Credits</th>
<th>1 to 11 credits</th>
<th>12 to 18 credits</th>
<th>Over 18 credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>per credit hour</td>
<td>per semester</td>
<td>per credit hour</td>
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<tr>
<td>1 to 11</td>
<td>$9.00</td>
<td>$108.00</td>
<td>$9.00</td>
</tr>
<tr>
<td>12 to 18</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Over 18</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CLIFFE COLLEGE OF LIBERAL ARTS &amp; SOCIAL SCIENCES (JUNIOR AND ABOVE)</td>
<td></td>
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</tr>
<tr>
<td>1 to 11</td>
<td>$8.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12 to 18</td>
<td>$102.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Over 18</td>
<td>$8.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COLLEGE OF SCIENCE, TECHNOLOGY, ENGINEERING &amp; MATHEMATICS (JUNIOR AND ABOVE)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 to 11</td>
<td>$25.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12 to 18</td>
<td>$300.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Over 18</td>
<td>$25.00</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WILLIAMSON COLLEGE OF BUSINESS ADMINISTRATION (JUNIOR AND ABOVE)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 to 11</td>
<td>$20.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12 to 18</td>
<td>$240.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Over 18</td>
<td>$20.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COLLEGE CREDIT PLUS INSTRUCTIONAL FEE (High School Students Participating in State of Ohio College Credit Plus Program)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Taught by the High School teacher at student’s high school</td>
<td>$41.64</td>
<td>per credit hour</td>
<td></td>
</tr>
<tr>
<td>Taught by YSU Instructor at High School</td>
<td>$83.28</td>
<td>per credit hour</td>
<td></td>
</tr>
<tr>
<td>Taught by YSU Instructor online/campus</td>
<td>$166.55</td>
<td>per credit hour</td>
<td></td>
</tr>
</tbody>
</table>

### HOUSING CHARGES

#### Housing Charges

<table>
<thead>
<tr>
<th>FY2020 Cohort</th>
</tr>
</thead>
<tbody>
<tr>
<td>Room &amp; Board (per academic year)</td>
</tr>
<tr>
<td>Room</td>
</tr>
<tr>
<td>Board (12 meals plan)</td>
</tr>
<tr>
<td>Room &amp; Board (per academic year) FY2019 Cohort</td>
</tr>
<tr>
<td>Room</td>
</tr>
<tr>
<td>Board (12 meals plan)</td>
</tr>
<tr>
<td>FY2018 Cohort</td>
</tr>
<tr>
<td>Room</td>
</tr>
<tr>
<td>Board (12 or 8 meal plans)</td>
</tr>
<tr>
<td>Residence Hall Application Fee (academic year and/or summer)</td>
</tr>
<tr>
<td>Housing Reservation / Pre-Payment</td>
</tr>
<tr>
<td>Single Room Upcharge</td>
</tr>
<tr>
<td>Weller House</td>
</tr>
<tr>
<td>Small on-bedroom apartment (per month, room only)</td>
</tr>
<tr>
<td>Large on-bedroom apartment (per month, room only)</td>
</tr>
</tbody>
</table>
Penguin Tuition Promise Rates

**Small two-bedroom apartment (per month, room only)** $750.00

**Large two-bedroom apartment (per month, room only)** $800.00

**Three-bedroom apartment (per month, room only)** $900.00

**Expanded Housing Rate (overoccupied rooms)** $4,100.00

**Student Housing During Academic Breaks**

- Fall semester early arrival or spring semester late stay (per day, no meals) $27.00
- Full winter break period (no meals) $250.00

**Cancellation Fee**

- Before April 1 (academic year) or December 15 (spring only) $0.00
- After April 1 and before June 15 (academic year) $250.00
- After June 15 and before August 1 (academic year) or after January 5 and before move-in day (spring only) $300.00
- After August 1 and before move-in day (academic year) $350.00

**Summer**

- Summer Room and Board $340.00 per week per week, meals included

**Summer Event Housing Rates**

- Rooms with community bathrooms (per night) $40.00
- Rooms with private or semi-private bathrooms (per night) $60.00

**Apartment-style housing (weekly rates only)**

- One-bedroom apartment $150.00
- Two-bedroom apartment $200.00
- Three-bedroom apartment $225.00
- Linens (for rent, per set) $25.00
- Bed adjustment fee (per bed) $10.00
- Additional staffing (per night, all groups with minors, or as requested by others) $120.00
- Late check-in or check-out fee (per hour) $50.00

**Courtyard Apartments** (room only, per person)

- 1 bed / 1 bath $835.00 per month
- 2 bed / 2 bath $710.00 per month
- 4 bed / 2 bath $620.00 per month

**Annual 12-Month Lease Rates**

- 1 bed / 1 bath room $10,020.00
- 2 bed / 2 bath room $8,520.00
- 4 bed / 2 bath room $7,440.00

**Voluntary Board Plan (Students Not in University Housing) Please Go To Y Card Portal (https://ycard.ysu.edu) or Call Penguin Xing At Ext. 3516.**

*Room and board amount shown here is based on Bronze-level meal plan selections. Rates are for Kilcawley, Wick, Lyden, and Cafaro houses.

**Effective FY18, Weller House converted to graduate and family housing, and rates charged per apartment instead of per bed.**

---

**Special-Purpose Fees**

<table>
<thead>
<tr>
<th>Fee Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACT Test Fee</td>
<td>$55.00</td>
</tr>
<tr>
<td>Art Usage Fee</td>
<td>$29.00</td>
</tr>
<tr>
<td>Career Service Fee - Level 1 - Freshman and Sophomore</td>
<td>$1.75 per credit hour</td>
</tr>
<tr>
<td>Career Service Fee - Level 2 - Junior and Senior</td>
<td>$2.75 per credit hour</td>
</tr>
<tr>
<td>College Level Examination Program Test Fee (CLEP)</td>
<td>$25.00</td>
</tr>
<tr>
<td>College over 60 Registration fee</td>
<td>$5.00</td>
</tr>
<tr>
<td>Course Book, eBook, and instructional supplies</td>
<td>Variable</td>
</tr>
<tr>
<td>Credit by Examination[^1]</td>
<td>$20.00 per credit hour</td>
</tr>
<tr>
<td>Deferred Payment fee (employer paid only)</td>
<td>$50.00</td>
</tr>
<tr>
<td>Equipment Materials &amp; Damage Replacement Fee</td>
<td>Replacement value</td>
</tr>
<tr>
<td>Federal Background Check</td>
<td>$28.00</td>
</tr>
<tr>
<td>Graduate Accelerated Program Fee</td>
<td>$50.00</td>
</tr>
<tr>
<td>Graduation Fee</td>
<td>$65.00</td>
</tr>
<tr>
<td>Graduation Fee Late Application (after 3rd wk. of term)</td>
<td>$38.50</td>
</tr>
<tr>
<td>Health Center Fee</td>
<td>$34.00 per semester</td>
</tr>
<tr>
<td>Honors College Fee</td>
<td>$25.00</td>
</tr>
<tr>
<td>Installation Payment Plan Enrollment Fee</td>
<td>$50.00 per semester maximum</td>
</tr>
<tr>
<td>Internal Revenue Service/1098T penalty for incorrect name/SSN match</td>
<td>$100.00</td>
</tr>
<tr>
<td>International Student Activities Fee</td>
<td>Variable</td>
</tr>
<tr>
<td>International Student Health Insurance pass-thru charge, set by Ins. Carrier-</td>
<td>Variable</td>
</tr>
<tr>
<td>International Student Program Fee</td>
<td>$75.00 per semester</td>
</tr>
<tr>
<td>International Student Storage Fee</td>
<td>$5.00</td>
</tr>
<tr>
<td>International Student Transportation Fee</td>
<td>$40.00</td>
</tr>
<tr>
<td>Late Class Add Fee (Charged for each course added after the last published date to add a class)</td>
<td>$50.00 per course</td>
</tr>
<tr>
<td>Late Payment Fee</td>
<td>$50.00 per month</td>
</tr>
<tr>
<td>Late Registration Fee</td>
<td>$75.00</td>
</tr>
<tr>
<td>MAT Test</td>
<td>$90.00</td>
</tr>
<tr>
<td>NCAA Permissible Expenses</td>
<td>Variable</td>
</tr>
<tr>
<td>Ohio Attorney General Payment/Collection Fee</td>
<td>Variable</td>
</tr>
<tr>
<td>Parking - see below</td>
<td>Variable</td>
</tr>
<tr>
<td>Peace Officer Training Academy Fee</td>
<td>$300.00 per semester</td>
</tr>
<tr>
<td>Performance Music Fee</td>
<td>$75.00 per credit</td>
</tr>
</tbody>
</table>
Placement & Supervision for Overseas Student Teaching

<table>
<thead>
<tr>
<th>Description</th>
<th>Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proficiency Examination</td>
<td>$45.00 per course</td>
</tr>
<tr>
<td>Student Locker Rental</td>
<td>$25.00 per year</td>
</tr>
<tr>
<td>Student Success</td>
<td>$35.00</td>
</tr>
<tr>
<td>Study Abroad Fee - Faculty Led</td>
<td>Variable - based on actual travel costs</td>
</tr>
<tr>
<td>Study Abroad Fee - Individual</td>
<td>$75.00</td>
</tr>
<tr>
<td>Transportation Fee, Fall &amp; Spring Terms (Required 6 plus credit hours listed in campus courses)</td>
<td>$115.00 per semester</td>
</tr>
<tr>
<td>Transportation Fee, Summer Term (Required for 6 plus credit hours listed on campus courses)</td>
<td>$58.00 per semester</td>
</tr>
<tr>
<td>Undergraduate Application Fee (first time applicant)</td>
<td>$45.00</td>
</tr>
<tr>
<td>Web-Based Course Fee</td>
<td>$100.00 per course</td>
</tr>
</tbody>
</table>

1 Credit awarded for courses based upon the successful completion of a test administered by an academic department at YSU. The course title appears on the transcript but no grade is listed.

2 A course or courses may be waived based on the performance on an examination. No academic credit is given and the course is not listed in the transcript.

SERVICE CHARGES

<table>
<thead>
<tr>
<th>Description</th>
<th>Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Check Replacement Fee</td>
<td>$25.00</td>
</tr>
<tr>
<td>Child Preschool Laboratory Fee</td>
<td>$150.00 per semester</td>
</tr>
<tr>
<td>Computer-Based Placement Re-Test</td>
<td>$20.00 per test</td>
</tr>
<tr>
<td>Credit Card Convenience Fee (student accounts only)</td>
<td>2.85% minimum of $3.00</td>
</tr>
<tr>
<td>Duplicate Diploma Fee</td>
<td>$40.00</td>
</tr>
<tr>
<td>Finger Printing Fee</td>
<td>$37.00 per occurrence</td>
</tr>
<tr>
<td>Human Performance and Exercise Science Activity</td>
<td>Variable to cover cost in that course</td>
</tr>
<tr>
<td>Intramural Team Deposit</td>
<td>$10.00 per team</td>
</tr>
<tr>
<td>PC Data Recovery Service Fee</td>
<td>$100.00 per occurrence</td>
</tr>
<tr>
<td>PC Remediation Service Fee (if 3 or more occurrences per academic year)</td>
<td>$75.00</td>
</tr>
<tr>
<td>Photo I.D. Replacement Charge</td>
<td>$25.00</td>
</tr>
<tr>
<td>Reading Tutoring Fee</td>
<td>$38.00 per semester</td>
</tr>
<tr>
<td>Returned Check or Credit Card Charge</td>
<td>$30.00</td>
</tr>
<tr>
<td>Rich Autism Center Pre-School Programs</td>
<td>$125.00 per week</td>
</tr>
<tr>
<td>Student Health Insurance</td>
<td>Go To: <a href="http://cms.ysu.edu/">http://cms.ysu.edu/</a> administrative-offices/student-health/student-health (<a href="http://cms.ysu.edu/administrative-offices/student-health/student-health/">http://cms.ysu.edu/administrative-offices/student-health/student-health/</a>)</td>
</tr>
<tr>
<td>Transcript Fee</td>
<td>$6.00</td>
</tr>
<tr>
<td>Transcript Rush Fee (same day processing, US mail or in person)</td>
<td>$12.00</td>
</tr>
<tr>
<td>Transcript Rush Fee (overnight express)</td>
<td>$35.00</td>
</tr>
</tbody>
</table>

PARKING

<table>
<thead>
<tr>
<th>Description</th>
<th>Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control Card Replacement</td>
<td>$5.00</td>
</tr>
<tr>
<td>Parking per day without permit</td>
<td>$5.00</td>
</tr>
<tr>
<td>Parking per week without permit</td>
<td>$18.00</td>
</tr>
<tr>
<td>Parking Permit (commuter) – Students, Fall &amp; Spring - Optional</td>
<td>$45.00</td>
</tr>
<tr>
<td>Parking Permit (overnight) – Students, Fall &amp; Spring - Optional</td>
<td>$90.00</td>
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Parking Violations/Fines:

<table>
<thead>
<tr>
<th>Class</th>
<th>Description</th>
<th>Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class 1 – Minor violations</td>
<td>1st offense</td>
<td>$25.00</td>
</tr>
<tr>
<td></td>
<td>2nd offense</td>
<td>$30.00</td>
</tr>
<tr>
<td></td>
<td>3rd offense</td>
<td>$35.00</td>
</tr>
<tr>
<td>Class 2 – Major violations</td>
<td>$100.00</td>
<td></td>
</tr>
<tr>
<td>Class 3 – Legal violations</td>
<td>$250.00</td>
<td></td>
</tr>
</tbody>
</table>

For more information, consult Parking Violations Information (https://cms.ysu.edu/administrative-offices/parking-services/parking-violations/).

MAGG LIBRARY & CURRICULUM RESOURCE CENTER FINES & FEES

<table>
<thead>
<tr>
<th>Description</th>
<th>Fee</th>
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</thead>
<tbody>
<tr>
<td>Library Material Replacement Fee</td>
<td>Market Value</td>
</tr>
<tr>
<td>Library Study Carrel Rental</td>
<td>$25.00</td>
</tr>
<tr>
<td>OhioLink Material Replacement Fee</td>
<td>$110.00</td>
</tr>
<tr>
<td>Overdue Closed Reserve Material Daily Rental (per day)</td>
<td>$0.55</td>
</tr>
<tr>
<td>Overdue Closed Reserve Material Hourly Rental (per hour)</td>
<td>$0.55</td>
</tr>
<tr>
<td>Overdue InterLibrary Material (per day)</td>
<td>$0.05</td>
</tr>
<tr>
<td>Overdue Maag/Depository Material (per day)</td>
<td>$0.10</td>
</tr>
<tr>
<td>Overdue OhioLINK Material (per day)</td>
<td>$0.50</td>
</tr>
<tr>
<td>Replacement Processing Fee</td>
<td>$10.00</td>
</tr>
<tr>
<td>SearchOhio (OhioLINK partner) Overdue fine (per day)</td>
<td>$0.50</td>
</tr>
<tr>
<td>SearchOhio (OhioLINK partner) Material Replacement Fee</td>
<td>$25.00</td>
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For further Circulation policy details, visit MAAG Circulation Policy (http://maag.ysu.edu/).

STUDENT FINES FOR VIOLATIONS OF THE STUDENT CODE OF CONDUCT

Alcohol abuse violations:

<table>
<thead>
<tr>
<th>Offense</th>
<th>Fee</th>
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<tbody>
<tr>
<td>First offense</td>
<td>$75.00</td>
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<tr>
<td>Second offense</td>
<td>$125.00</td>
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<tr>
<td>Third offense</td>
<td>$175.00</td>
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</tbody>
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Drug/controlled substance abuse violations:

<table>
<thead>
<tr>
<th>Offense</th>
<th>Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>First offense</td>
<td>$100.00</td>
</tr>
<tr>
<td>Second offense</td>
<td>$150.00</td>
</tr>
<tr>
<td>Third offense</td>
<td>$250.00</td>
</tr>
</tbody>
</table>

Failure to attend conduct hearing | $25.00 |

Failure to complete disciplinary action | $25.00 |

Restitution for lost/stolen/damaged property | $50.00 |

Violation for drug sales or distribution | $250.00 |

Violation for theft | $150.00 |

Violation for violent or threatening behavior | $150.00 |

Violation for weapons | $150.00 |

Violations - Other | up to $250.00 |

THE UNIVERSITY RESERVES THE RIGHT TO CHANGE ANY FEE WITHOUT NOTICE. PLEASE CHECK CAMPUS ANNOUNCEMENTS AND REVIEW CAMPUS
Non-Tuition Promise

Tuition and fees are assessed based upon the number of credit hours of enrollment, residency, course, and/or program. The Board of Trustees of Youngstown State University has pledged to make every effort to keep the required fees as low as is consistent with providing quality education. It is intended that fees not be adjusted more often than annually and that fee changes be announced in the spring or early summer. The Board of Trustees does, however, reserve the right to change any fee, charge, or fine without notice if conditions warrant.

Students should refer to Penguin Tuition Promise (p. 21) if they will be a new first-year, transfer, or re-admitted degree-seeking undergraduate after Spring 2018.

Non-Tuition Promise Description of Fees

The Board of Trustees of Youngstown State University has pledged to make every effort to keep the required fees as low as is consistent with providing quality education. It is intended that fees not be adjusted more often than annually and that fee changes be announced in the spring or early summer. The Board of Trustees does, however, reserve the right to change any fee, charge, or fine without notice if conditions warrant.

Fees

INSTRUCTIONAL FEE
This fee is assessed to all non-tuition promise students each term. This fee supplements the state subsidy and is a source of revenue for the University’s educational and general fund.

GENERAL FEE
This fee is for non-instructional services such as Kilcawley Center, intercollegiate athletics, intramural sports, performing artists and lecture programs, and student government.

INFORMATION SERVICES FEE
This fee is applied on a per-credit basis to provide information technology infrastructure and services across campus, including the new Student Information Systems, wireless connectivity, classroom technology, and a continuous strengthening and securing of the computing and networking environment. It provides support for technology enhancements and initiatives contained within the IT Master Plan, supporting the vision to keep pace with an evolving, interactive, student-centered and collaborative electronic learning environment.

NON-RESIDENT TUITION SURCHARGES
Those students who are not legal residents of Ohio must pay a surcharge in addition. Students who are residents of the Affordable Tuition Advantage area pay a lesser surcharge than students who are legal residents of other states and/or areas. The Affordable Tuition Advantage area includes the counties of Allegheny, Armstrong, Beaver, Butler, Clarion, Crawford, Erie, Fayette, Forest, Greene, Indiana, Jefferson, Lawrence, Mercer, Venango, Warren, Washington, and Westmoreland counties in Pennsylvania; Chautauqua County in New York; and Brooke, Hancock, Marshall, and Ohio counties in West Virginia.

AUDITED COURSES
Students may audit courses (i.e., register to take a course without receiving credit). The fee for auditing a course is the same as if the course were taken for credit.

COLLEGE FEE
This fee is designed to recognize the differential cost of instruction among colleges. Examples of use include research instrumentation, enhanced teaching equipment, specialized software, specialized information resources (databases), maintenance and repair of capital equipment, technical and laboratory personnel support, and lab and instructional space upgrades.

COURSE BOOK AND SUPPLY FEE
This fee represents the cost for electronic materials such as eBooks that are used in designated course(s). This fee is non-refundable after the 100% tuition refund period and cannot be appealed.

COURSE FEES
This fee is designed to partially offset expenses associated with courses that make use of supplies, equipment or personnel support beyond that associated with typical lecture courses. Examples include chemical supplies, engineering equipment, computers, software, and lab monitors. In addition, the Student Success Course Fee is designed to partially offset expenses associated with Campus Sexual Violence Elimination (SaVe) Act training, Financial Aid materials and training sessions with Financial Aid, Content and programming for a common intellectual experience including speakers and campus-wide events, Other materials, handouts, and software related to common elements of first year experience courses.

CREDIT BY EXAMINATION FEE
A fee is charged for each course for an individual examination provided by an academic department to determine whether a student can be given academic credit for his or her knowledge of the course material. The fee must be paid before the test can be taken. This fee is charged on a per-credit basis.

DISTANCE EDUCATION LEARNING FEES
This fee is to offset the cost of technology and support needed to support online courses.

GRADUATION FEE
This nonrefundable fee is assessed when students apply to graduate to cover costs associated with graduation. If a student defers graduation and has paid the fee, the payment remains valid for the two academic terms following the term of application. Should a student graduate with more than one degree at a time, the fee will only be charged once.

HONORS COLLEGE FEE
This fee supports student learning objectives within the five pillars of the Honors College. Some of the programs and activities supported by this fee are the Honors College Retreat, Academic Journal, student research, student presentations, annual showcase, and volunteer and community service projects. Additionally, the fee serves as a source to staff programs and equip buildings with technology to foster and support educational development and student success.

INTERNATIONAL STUDENT CREDENTIAL EVALUATION FEE
The International Programs Office (IPO) is responsible for evaluating credentials from applicants earned at foreign high schools and universities. This fee supports the evaluation of those credentials including professional development of staff in this area. Each graduate applicant who submits credentials to be evaluated by IPO staff will be assessed this fee.

INTERNATIONAL STUDENT HEALTH INSURANCE FEE
Per YSU policy, all international students who attend YSU on an F-1 or J-1 visa and who are not sponsored by a government-related organization, are required to purchase Health Insurance. International students will be assessed this fee on their student account. YSU transfers the fee to the insurance company to
provide health insurance for the individual student. The rates are set by the insurer; therefore the fee is variable and may change from year-to-year.

INTERNATIONAL STUDENT PROGRAM FEE
The International Programs Office (IPO) is responsible for providing pre-admission advising and a wide array of student services unique to the international student population. This fee will support expenses related to pre-admission advising including technology support, travel, mailing and related expenses and international student services including providing appropriate academic advising to applicants, supporting immigration advising, supporting staff professional development related to immigration regulations and admission, and providing a range of general student support services including orientation, airport pickup and international activities. Each international student who is classified as either an undergraduate or graduate student will be assessed this fee.

LATE ADD FEE
Late adds will be granted on an exceptional basis only and there will be a late-add fee assessed for each course added after the add deadline. This fee is nonrefundable and cannot be appealed.

LATE APPLICATION FOR GRADUATION
Application for Graduation must be submitted within the first three weeks of the term. Applications submitted after this date will be assessed a non-refundable late fee.

LATE PAYMENT FEES
Payment of a bill received after the due date results in assessment of a late payment fee. All fees and charges billed must be paid in full. Partial payments will result in assessment of a late fee. Payment plan participants who do not pay their scheduled payment amount by the due date are also subject to assessment of a late payment fee.

LATE REGISTRATION FEE
A fee is charged a currently enrolled student who fails to register for the next term at the assigned time and later registers at the time assigned new or returning students.

NCAA PERMISSIBLE EXPENSES
This fee is for approved NCAA expenses such as meals incidental to participation, approved housing costs and fees, missed appointment charges, and other NCAA approved costs or charges.

PARKING FEE (OPTIONAL)
This fee is optional each term for non-tuition promise students registered for less than six credit hours in courses designated as on-campus. This fee is charged, upon request of the parking permit via Penguin Portal – and will appear on students’ accounts as a “parking fee.” The optional fee and parking permit will also allow the student to have unlimited access to shuttle service. Students requesting the parking permit after the 17th day of the term will not have the permit issued or shuttle services made available until payment of the fee. The fee supports the operating and maintenance costs of campus parking facilities, roadways and sidewalks, as well as student shuttle service. The fee does not guarantee an available space in any particular lot. Some facilities are restricted (e.g. for students only, for faculty and staff only, or resident hall residents only). The current Driving and Parking Regulations pamphlet and parking lot map should be consulted. The fee is assessed students taking music lessons and is applied on a per-credit basis.

PERFORMANCE MUSIC FEE
This fee offsets the cost of maintaining the programs and facilities of the Dana School of Music including the purchase and repair of equipment, rental of performance venues, recording and archiving of Dana events, and other expenses. The performance fee helps us provide the best possible experience for our students and follow standards set by the National Association of Schools of Music. This program fee is charged in addition to regular tuition. It is assessed students taking music lessons and is applied on a per-credit basis.

PROFICIENCY EXAMINATION FEE
A fee is charged for an examination provided by an academic department to determine a student’s proficiency for some reason other than assignment of academic credit. If academic credit is to be awarded, the credit by examination fee applies and not this fee.

STUDIO ART FEE
This fee enables the Department of Art to strategically plan for essential equipment upgrades and investment in new technologies that drive development and implementation of innovative curriculum including the purpose of large and costly equipment and digital technologies. As new processes and directions emerge in contemporary art, the Department of Art must introduce new and innovative instructional art making options into the curriculum to remain enrollment competitive with regional and national peer institutions.

TESTING FEES
The University Office of Testing supervises a variety of special tests used for admission to college, graduate, or professional schools. The fees are established by the agencies responsible for the tests. Students are advised to contact the Testing Office for information and to make reservations.

TRANSPORTATION FEE
This fee is charged to all non-tuition promise students each term registered for six or more credit hours in courses designated as on-campus. This fee will allow students to receive a parking permit (at no additional charge). Students must request the permit via Penguin Portal; the permit will give them unlimited access to shuttle service and admission into designated parking areas. The transportation fee supports the operating and maintenance costs of campus parking facilities, roadways and sidewalks, as well as student shuttle service. The fee does not guarantee an available space in any particular lot. Some facilities are restricted (e.g. for students only, for faculty and staff only, or resident hall residents only). The current Driving and Parking Regulations pamphlet and parking lot map should be consulted. The transportation fee is refundable only if the student has less than six credit hours (in courses designated as on-campus courses) by the last day of the 100% tuition refund period AND they return the permit access card and validation sticker within five days of either the withdrawal date or the last date of the 100% tuition refund period-whichever is earlier. The transportation fee is non-refundable after the 100% tuition refund period and cannot be appealed.

Service Charges

COMPUTER-BASED PLACEMENT RE-TEST FEE
A nonrefundable fee is charged each time a computer-based placement test is retaken.

DATA RECOVERY SERVICE FEE
Fee assessed to recover data and/or transfer data that was successfully recovered onto a media device provided by the students (i.e. flash drive, hard drive, or DVD). No fee assessed unless some or all of the data is recovered. Note: If it is necessary to remove the hard drive from the PC in order to recover data, the IT Service Desk will NOT be able to perform the service, and no fee will be charged to the student.
HEALTH CENTER FEE
Mercy Health Wick Primary Care at YSU is located on the corner of Wick and Lincoln Avenue. The Center provides health care to all currently enrolled YSU students – both resident and commuter students. These services are provided because of the Health Center Fee that is paid by all students each semester. The mandatory fee provides revenue to Mercy Health System to give student access to their Primary Care Facility. The center will be staffed by a full-time primary care physician and advanced practice provider. It will also provide the following services below:

Full service primary care practice
- Establish and develop continuity of care
- Address acute issues
- Walk-In Care location for non-scheduled visits
- Preventative care
- Extended hours
- Lab draw site

Mental health services
- Mental health, behavioral health and addiction issues addressed
- Two half-days per week
- Psychiatrist

Health care is available for illness, injury, first aid, and routine health checks. Health screening tests, physical exams for sports and academic programs, gynecological exams, as well as consultations and referrals, are provided. Flu and other immunizations are also given; however, there are charges for these injections.

Office visits are free. Students do not need to have health insurance to use the Center’s services. Blood tests, x-rays, lab tests, etc., ordered by a physician are done off campus at the student’s choice of provider and at the student’s expense.

Student records are kept strictly confidential. Information cannot be released to anyone without the written consent of the student. Certain public health diseases, however, must be reported to the Department of Health as required by law.

For more information, visit Student Health Clinic (https://urldefense.proofpoint.com/v2/url?u=https%3A__na01.safelinks.protection.outlook.com_-Furl-3Dhttp-253A-252F-252Fcc.ysu.edu-252Fstudent-2Dservices-252Fhealth...g8FKZtZW4wKWQUB2EAdNoMAtUf5qc4dhroQVcs-253D-26reserved-3D0&d=DwMGaQ&c=0W9Vy5nnhl9u_nrqx4vrzKSNz08jjO3fIve6wVqRTVo&r=Rw57s-)

INTERNATIONAL STUDENT ACTIVITIES FEE
The International Programs Office (IPO) arranges social and cultural activities of cross-cultural nature. IPO may charge a nominal fee in order to defray the cost of such activities.

INTERNATIONAL STUDENT STORAGE FEE
The International Programs Office (IPO) arranges for international students to have access to secure storage for their belongings over the summer break. International students who wish to store their belongings are assessed this fee per box.

INTERNATIONAL STUDENT TRANSPORTATION FEE
The International Programs Office (IPO) arranges transportation at the end of each semester to the airport. Students who wish to reserve a space on the airport shuttle are assessed this fee. The intent of this fee is to defray the costs associated with providing transportation services.

PAYMENT PLAN ENROLLMENT FEE
A nonrefundable fee is charged for enrollment in the payment plan. All tuition and fees are due in full by the payment due date unless the student enrolls in the payment plan.

PC REMEDIATION SERVICE FEE
Fee assessed for removal of all spyware and viruses from the PC and for installing the most current updates to applications and the operating system to help reduce the risk of future attacks. The first two PC remediation services are provided free of charge to current YSU students; the fee only applies to remediation performed beyond the first two free services.

PLACEMENT & SUPERVISION FEE FOR OVERSEAS STUDENT TEACHING
Through the Consortium for Overseas Student Teaching (COST), teacher candidates are placed in public and private institutions in various locations around the world where English is the language of instruction. YSU students who student teach overseas through COST will be charged a placement and supervision fee. The fee is established by COST and the entire amount is paid to them for the administration of the program. The fee amount varies and may be higher in some overseas sites.

PHYSICAL EDUCATION ACTIVITY CHARGE
Certain activity courses (e.g. bowling, skiing, ice skating, scuba diving) are assessed by the respective department. The fee is paid to the facility or transportation. These charges are set by the operator of the facility, not the University, and are in addition to any other applicable fee.

RETURNED CHECK, ACH (ELECTRONIC CHECK), OR CREDIT CARD CHARGE
A charge is levied on anyone whose check, ACH, or charge is returned unpaid by the bank. If any late payment results therefrom, the applicable fee is also assessed. Failure to pay billing of return check, ACH, and/or charge within six days; and/or a second check, ACH, or charge return will result in the University not accepting this type of payment at any of its collection points and may subject the student to financial suspension for the term.

STUDENT LOCKER RENTAL
A limited number of lockers are available in various buildings for the convenience of commuting students. Locker payments and assignments are made in Kilcawley Center at the Penguin Xing.

IDENTIFICATION CARD REPLACEMENT CHARGE
A nonrefundable charge is made for replacement of an ID card.

STUDENT LOCKER RENTAL
A limited number of lockers are available in various buildings for the convenience of commuting students. Locker payments and assignments are made in Kilcawley Center at the Penguin Xing.
TRANSCRIPT OF CREDITS CHARGE
There is a charge for normal transcript processing requests as well as rush or overnight express requests issued by the Office of Records. Transcripts will not be issued for anyone with outstanding debts owed to the University.

Fines
LIBRARY FINES
Fines are assessed for failure to return books on time as stipulated or for the unauthorized removal of a reserved book. Willful damage of defacement of library materials or other property is a violation of state law and is punished as such.

PARKING VIOLATION FINE
Parked without a permit, parking in unauthorized areas and other offenses as identified in the Parking Regulations brochure will result in the issuance of a citation against the vehicle and its owner, or against the student responsible for the vehicle (e.g., a student driving a parent's car). Payment of a fine removes the citation. In certain cases, vehicles may be towed. See the regulations (https://cms.ysu.edu/administrative-offices/parking-services/rules-regulations/) for detailed information.

STUDENT CODE OF CONDUCT VIOLATION
Fines may be assessed to students who have violated The Student Code of Conduct. These fines can be assessed by the Student Conduct Administrator or the Student Conduct Board after a disciplinary hearing. For additional information regarding student conduct fines, please contact the Student Conduct office at 330-941-4704.

Non-Tuition Promise Rates
Student Fees and Charges
Effective Fall 2020
(Instructional Fee, General Fee, and Information Services fees are required of all Non-Tuition Promise undergraduate students except where noted)

TUITION

INSTRUCTIONAL FEE
Undergraduate Non-Tuition Promise
1 to 11 credits $280.91 per credit hour
12 to 18 credits $3,370.92 per semester
Over 18 credits $280.91 per credit hour

Undergraduate Online Programs (not eligible for payment plan enrollment)
Over 18 credits $280.91 per credit hour

GENERAL FEE
Note: General fee does not apply to distance learning and online programs
1 to 11 credits $59.27 per credit hour
12 to 18 credits $711.24 per semester
Over 18 credits $59.27 per credit hour

INFORMATION SERVICES FEE
Note: Does not apply to Online Programs
1 to 11 credits $10.40 per credit hour
12 to 18 credits $124.80 per semester
Over 18 credits $10.40 per credit hour

NON-RESIDENT TUITION SURCHARGE INFORMATION
As noted above, all Non-Tuition Promise undergraduate students pay the instructional fee, the general fee, and the information services fee. Those students who are not legal residents of Ohio must pay a surcharge in addition. Students who are residents of the Affordable Tuition Advantage area pay a lesser surcharge than students who are legal residents of other states and/or areas. The Affordable Tuition Advantage area includes the counties of Allegheny, Armstrong, Beaver, Butler, Clarion, Crawford, Erie, Fayette, Forest, Greene, Indiana, Jefferson, Lawrence, Mercer, Venango, Warren, Washington, and Westmoreland counties in Pennsylvania; Chautauqua County in New York; and Brook, Hancock, Marshall, and Ohio counties in West Virginia.

AFFORDABLE TUITION ADVANTAGE SURCHARGE
Note: Does not apply to Online Programs

<table>
<thead>
<tr>
<th>Credits</th>
<th>Surcharge</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 to 11</td>
<td>$15.00</td>
<td>per credit hour</td>
</tr>
<tr>
<td>12 to 18</td>
<td>$180.00</td>
<td>per semester</td>
</tr>
<tr>
<td>Over 18</td>
<td>$15.00</td>
<td>per credit hour</td>
</tr>
</tbody>
</table>

NON-REGIONAL SERVICE AREA SURCHARGE
(Includes on-campus students who are out of state and out of the Affordable Tuition Area and Distance Learning. Does not apply to Online Programs)

<table>
<thead>
<tr>
<th>Credits</th>
<th>Surcharge</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 to 11</td>
<td>$250.00</td>
<td>per credit hour</td>
</tr>
<tr>
<td>12 to 18</td>
<td>$3,000.00</td>
<td>per semester</td>
</tr>
<tr>
<td>Over 18</td>
<td>$250.00</td>
<td>per credit hour</td>
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</table>

NON-REGIONAL SERVICE AREA SURCHARGE (online programs)

<table>
<thead>
<tr>
<th>Credits</th>
<th>Surcharge</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 to 11</td>
<td>$5.00</td>
<td>per credit hour</td>
</tr>
<tr>
<td>12 to 18</td>
<td>$60.00</td>
<td>per semester</td>
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<tr>
<td>Over 18</td>
<td>$5.00</td>
<td>per credit hour</td>
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</table>

COLLEGE FEES

BEEGHLY COLLEGE OF EDUCATION (ALL UNDERGRADUATES)

<table>
<thead>
<tr>
<th>Credits</th>
<th>Surcharge</th>
<th>Type</th>
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</thead>
<tbody>
<tr>
<td>1 to 11</td>
<td>$8.00</td>
<td>per credit hour</td>
</tr>
<tr>
<td>12 to 18</td>
<td>$96.00</td>
<td>per semester</td>
</tr>
<tr>
<td>Over 18</td>
<td>$8.00</td>
<td>per credit hour</td>
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</tbody>
</table>

BEEGHLY COLLEGE OF LIBERAL ARTS, SOCIAL SCIENCES, AND EDUCATION (JUNIOR AND ABOVE) - Effective Spring 2021

<table>
<thead>
<tr>
<th>Credits</th>
<th>Surcharge</th>
<th>Type</th>
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</thead>
<tbody>
<tr>
<td>1 to 11</td>
<td>$8.00</td>
<td>per credit hour</td>
</tr>
<tr>
<td>12 to 18</td>
<td>$96.00</td>
<td>per semester</td>
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<tr>
<td>Over 18</td>
<td>$8.00</td>
<td>per credit hour</td>
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</tbody>
</table>

BITONTE COLLEGE OF HEALTH & HUMAN SERVICES (JUNIOR AND ABOVE)

<table>
<thead>
<tr>
<th>Credits</th>
<th>Surcharge</th>
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<tbody>
<tr>
<td>1 to 11</td>
<td>$12.50</td>
<td>per credit hour</td>
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<tr>
<td>12 to 18</td>
<td>$150.00</td>
<td>per semester</td>
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<tr>
<td>Over 18</td>
<td>$12.50</td>
<td>per credit hour</td>
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COLLEGE OF CREATIVE ARTS & COMMUNICATIONS (ALL UNDERGRADUATES)

<table>
<thead>
<tr>
<th>Credits</th>
<th>Surcharge</th>
<th>Type</th>
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<tbody>
<tr>
<td>1 to 11</td>
<td>$9.00</td>
<td>per credit hour</td>
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<tr>
<td>12 to 18</td>
<td>$108.00</td>
<td>per semester</td>
</tr>
<tr>
<td>Over 18</td>
<td>$9.00</td>
<td>per credit hour</td>
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COLLEGE OF LIBERAL ARTS & SOCIAL SCIENCES (JUNIOR AND ABOVE)

<table>
<thead>
<tr>
<th>Credits</th>
<th>Surcharge</th>
<th>Type</th>
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</thead>
<tbody>
<tr>
<td>1 to 11</td>
<td>$8.50</td>
<td>per credit hour</td>
</tr>
<tr>
<td>12 to 18</td>
<td>$102.00</td>
<td>per semester</td>
</tr>
<tr>
<td>Over 18</td>
<td>$8.50</td>
<td>per credit hour</td>
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</tbody>
</table>
### Non-Tuition Promise Rates

**COLLEGE OF SCIENCE, TECHNOLOGY, ENGINEERING & MATHEMATICS (JUNIOR AND ABOVE)**

<table>
<thead>
<tr>
<th>Credits Range</th>
<th>Fee per Credit Hour</th>
<th>Fee per Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 to 11 credits</td>
<td>$25.00</td>
<td>$25.00</td>
</tr>
<tr>
<td>12 to 18 credits</td>
<td>$300.00</td>
<td>$300.00</td>
</tr>
<tr>
<td>Over 18 credits</td>
<td>$25.00</td>
<td>$25.00</td>
</tr>
</tbody>
</table>

**WILLIAMSON COLLEGE OF BUSINESS ADMINISTRATION (JUNIOR AND ABOVE)**

<table>
<thead>
<tr>
<th>Credits Range</th>
<th>Fee per Credit Hour</th>
<th>Fee per Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 to 11 credits</td>
<td>$20.00</td>
<td>$20.00</td>
</tr>
<tr>
<td>12 to 18 credits</td>
<td>$240.00</td>
<td>$240.00</td>
</tr>
<tr>
<td>Over 18 credits</td>
<td>$20.00</td>
<td>$20.00</td>
</tr>
</tbody>
</table>

### COLLEGE CREDIT PLUS INSTRUCTIONAL FEE

(For Ohio College Credit Plus Program)

Note: General and Informational Services Fees are waived.

- Taught by the High School teacher at student's high school: $41.64 per credit hour
- Taught by YSU Instructor at High School: $83.28 per credit hour
- Taught by YSU Instructor online/campus: $166.55 per credit hour

### HOUSING CHARGES

**Housing Charges**

- Room and Board (per academic year) for F2020 Cohort: $9,700.00 (Payable as follows: $4,850.00 fall semester, and $4,850.00 spring semester)
- Room: $5,772.00
- Board (12 meals): $3,928.00
- Room and Board (per academic year) for F2019 Cohort: $9,700.00 (Payable as follows: $4,850.00 fall semester, and $4,850.00 spring semester)
- Room: $5,772.00
- Board (12 meals): $3,928.00

**Room and Board (per academic year) for F2018 Cohort & Continuing Students**

- Room: $5,472.00
- Board: $3,928.00

**Residence Hall Application Fee**

- Academic year and/or summer: $35.00

**Housing Reservation / Pre-payment Fee**

- $250.00

**Single Room Upcharge**

- $1,440.00 per semester

#### Weller House Apartments

- Small one-bedroom apartment (per month, room only): $600.00
- Large one-bedroom apartment (per month, room only): $650.00
- Small two-bedroom (per month, room only): $750.00
- Large two-bedroom apartment: $800.00

#### Expanded Housing Rate (overoccupied)

- $4,100.00

### Student Housing During Academic Breaks

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full semester early arrival or spring</td>
<td>$27.00</td>
</tr>
<tr>
<td>semester late stay (per day, no meals)</td>
<td></td>
</tr>
<tr>
<td>Full winter break period (no meals)</td>
<td>$250.00</td>
</tr>
</tbody>
</table>

### Cancellation Fee

- Before April 1 (academic year) or December 15 (spring only): $0.00
- After April 1 and before June 15 (academic year): $250.00
- After June 15 and before August 1 (academic year) or after January 5 and before move-in day (spring only): $300.00
- After August 1 and before move-in day (academic year): $350.00

### Summer Housing

#### Summer Room and Board

- $340.00 (per week. includes meals)

### Summer Event Housing Rates

- Room with community bathrooms (per night): $40.00
- Rooms with private or semi-private bathrooms (per night): $60.00
- Apartment-style housing (weekly rates only)
  - One-bedroom apartment: $150.00
  - Two-bedroom apartment: $200.00
  - Three-bedroom apartment: $225.00
  - Linens (for rent, per set): $25.00
  - Bed adjustment fee (per bed): $10.00
  - Additional staffing (per night, all groups with minors, or as requested): $120.00
  - Late check-in or check-out fee (per hour): $50.00

### Voluntary Board Plan

- (students not in University housing) go to https://ycard.ysu.edu/ or call Penguin Xing at Ext. 3516.

#### Courtyard Apartments (room only, per person)

- 1 bed / 1 bath: $835.00 per month
- 2 bed / 2 bath: $710.00 per month
- 4 bed / 2 bath: $620.00 per month

#### Annual 12-Month Lease Rates

- 1 bed / 1 bath room: $10,020.00
- 2 bed / 2 bath room: $8,520.00
- 4 bed / 2 bath room: $7,440.00

### SPECIAL-PURPOSE FEES

<table>
<thead>
<tr>
<th>Fee</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACT Test Fee</td>
<td>$55.00</td>
</tr>
<tr>
<td>Art Usage Fee</td>
<td>$29.00 per course</td>
</tr>
<tr>
<td>Career Service Fee - Level 1 - Freshman and Sophomore</td>
<td>$1.75 per credit hour</td>
</tr>
<tr>
<td>Career Service Fee - Level 2 - Junior and Senior</td>
<td>$2.75 per credit hour</td>
</tr>
</tbody>
</table>

### VOLUNTARY BOARD PLAN (STUDENTS NOT IN UNIVERSITY HOUSING) PLEASE GO TO Y Card Portal (https://ycard.ysu.edu) OR CALL PENGUIN XING AT EXT. 3516.

*Room and board amount shown here is based on Bronze-level meal plan selections. Rates are for Kilcawley, Wick, Lyden, and Cafaro houses.

**Effective FY18, Weller House converted to graduate and family housing, and rates charged per apartment instead of per bed.

### EXPANSION OR SPECIAL-PURPOSE FEES

<table>
<thead>
<tr>
<th>Fee</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACT Test Fee</td>
<td>$55.00</td>
</tr>
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<td>Art Usage Fee</td>
<td>$29.00 per course</td>
</tr>
<tr>
<td>Career Service Fee - Level 1 - Freshman and Sophomore</td>
<td>$1.75 per credit hour</td>
</tr>
<tr>
<td>Career Service Fee - Level 2 - Junior and Senior</td>
<td>$2.75 per credit hour</td>
</tr>
<tr>
<td>Service Description</td>
<td>Fee</td>
</tr>
<tr>
<td>----------------------------------------------------------</td>
<td>------------------------------------------</td>
</tr>
<tr>
<td>Youngstown State University Undergraduate</td>
<td></td>
</tr>
<tr>
<td><strong>Course Fees</strong></td>
<td></td>
</tr>
<tr>
<td>Level 1</td>
<td>$35.00 per course</td>
</tr>
<tr>
<td>Level 2</td>
<td>$50.00 per course</td>
</tr>
<tr>
<td>Level 3</td>
<td>$65.00 per course</td>
</tr>
<tr>
<td>Level 4</td>
<td>$300.00 per course</td>
</tr>
<tr>
<td>Level 7</td>
<td>$20.00 per course</td>
</tr>
<tr>
<td>Level 8</td>
<td>$85.00 per course</td>
</tr>
<tr>
<td>Level 9</td>
<td>$25.00 per course</td>
</tr>
<tr>
<td>Level 10</td>
<td>$200.00 per course</td>
</tr>
<tr>
<td>Level 11 (cooperative charge)</td>
<td>$350.00 per course</td>
</tr>
<tr>
<td>Level 12</td>
<td>$300.00 per course</td>
</tr>
<tr>
<td>Level 13</td>
<td>$100.00 per course</td>
</tr>
<tr>
<td>Credit by Examination (^1)</td>
<td>$20.00 per credit hour</td>
</tr>
<tr>
<td>Deferred Payment fee (employer paid only)</td>
<td>$50.00</td>
</tr>
<tr>
<td>Internal Revenue Service/1098T penalty for incorrect name/SSN match</td>
<td>$100.00</td>
</tr>
<tr>
<td>International Student Activities Fee</td>
<td>Variable</td>
</tr>
<tr>
<td>International Student Health Insurance</td>
<td>Variable - pass-thru charge, set by Ins. Carrier-variable</td>
</tr>
<tr>
<td>International Student Program Fee</td>
<td>$75.00 per semester</td>
</tr>
<tr>
<td>International Student Storage Fee</td>
<td>$5.00</td>
</tr>
<tr>
<td>International Student Transportation Fee</td>
<td>$40.00</td>
</tr>
<tr>
<td>Late Class Add Fee (Charged for each course added after the last published date to add a class)</td>
<td>$50.00 per course</td>
</tr>
<tr>
<td>Late Payment Fee</td>
<td>$50.00 per month</td>
</tr>
<tr>
<td>Late Registration Fee</td>
<td>$75.00</td>
</tr>
<tr>
<td>MAT Test</td>
<td>$90.00</td>
</tr>
<tr>
<td>NCAA Permissible Expenses</td>
<td>Variable</td>
</tr>
<tr>
<td>Ohio Attorney General Payment/Collection Fee</td>
<td>Variable</td>
</tr>
<tr>
<td>Parking - see below</td>
<td></td>
</tr>
<tr>
<td>Peace Officer Training Academy Fee</td>
<td>$300.00 per semester</td>
</tr>
<tr>
<td>Performance Music Fee</td>
<td>$75.00 per credit</td>
</tr>
<tr>
<td>Placement &amp; Supervision for Overseas Student Teaching</td>
<td>Variable</td>
</tr>
<tr>
<td>Proficiency Examination (^2)</td>
<td>$45.00 per course</td>
</tr>
<tr>
<td>Student Locker Rental</td>
<td>$25.00 per year</td>
</tr>
<tr>
<td>Student Success</td>
<td>$35.00</td>
</tr>
<tr>
<td>Study Abroad Fee - Faculty Led</td>
<td>Variable - based on actual travel costs</td>
</tr>
<tr>
<td>Study Abroad Fee - Individual</td>
<td>$75.00</td>
</tr>
<tr>
<td>Study Abroad Fee - Faculty Led</td>
<td></td>
</tr>
<tr>
<td><strong>Transportation Fee, Fall &amp; Spring Terms</strong> (Required 6 plus credit hours listed in campus courses)</td>
<td>$115.00 per semester</td>
</tr>
<tr>
<td><strong>Transportation Fee, Summer Term</strong> (Required for 6 plus credit hours listed on campus courses)</td>
<td>$58.00 per semester</td>
</tr>
<tr>
<td>Undergraduate Application Fee</td>
<td>$45.00</td>
</tr>
<tr>
<td>Web-Based Course Fee</td>
<td>$100.00 per course</td>
</tr>
<tr>
<td>Youngstown Early College (per credit hour)</td>
<td>$114.21</td>
</tr>
<tr>
<td><strong>Service Charges</strong></td>
<td></td>
</tr>
<tr>
<td>Check Replacement Fee</td>
<td>$25.00</td>
</tr>
<tr>
<td>Child Preschool Laboratory Fee</td>
<td>$150.00 per semester</td>
</tr>
<tr>
<td>Computer-Based Placement Re-Test</td>
<td>$20.00 per test</td>
</tr>
<tr>
<td>Credit Card Convenience Fee (student accounts only)</td>
<td>2.85% minimum of $3.00</td>
</tr>
<tr>
<td>Duplicate Diploma Fee</td>
<td>$40.00</td>
</tr>
<tr>
<td>Finger Printing Fee</td>
<td>$37.00 per occurrence</td>
</tr>
<tr>
<td>Human Performance and Exercise Science Activity</td>
<td>Variable to cover cost in that course</td>
</tr>
<tr>
<td>Intramural Team Deposit</td>
<td>$10.00 per team</td>
</tr>
<tr>
<td>PC Data Recovery Service Fee</td>
<td>$100.00 per occurrence</td>
</tr>
<tr>
<td>PC Remediation Service Fee</td>
<td>$75.00</td>
</tr>
<tr>
<td>Photo I.D. Replacement Charge</td>
<td>$25.00</td>
</tr>
<tr>
<td>Reading Tutoring Fee</td>
<td>$38.00 per semester</td>
</tr>
<tr>
<td>Rich Autism Center Pre-School Programs</td>
<td>$125.00 per week</td>
</tr>
<tr>
<td>Transcript Fee</td>
<td>$6.00</td>
</tr>
<tr>
<td>Transcript Rush Fee (same day processing, US mail or in person)</td>
<td>$12.00</td>
</tr>
<tr>
<td>Transcript Rush Fee (overnight express)</td>
<td>$35.00</td>
</tr>
<tr>
<td><strong>PARKING</strong></td>
<td></td>
</tr>
<tr>
<td>Control Card Replacement</td>
<td>$5.00</td>
</tr>
<tr>
<td>Parking per day without permit</td>
<td>$5.00</td>
</tr>
<tr>
<td>Parking per week without permit</td>
<td>$18.00</td>
</tr>
<tr>
<td>Parking Permit – Students, Fall &amp; Spring (optional 0-5 credit hours)</td>
<td>$115.00</td>
</tr>
<tr>
<td>Parking Permit – Students, Summer Term (optional 0-5 credit hours)</td>
<td>$58.00</td>
</tr>
<tr>
<td>Parking Violations/Fines</td>
<td></td>
</tr>
<tr>
<td>Class 1 – Minor violations</td>
<td></td>
</tr>
<tr>
<td>1st offense</td>
<td>$25.00</td>
</tr>
<tr>
<td>2nd offense</td>
<td>$30.00</td>
</tr>
<tr>
<td>3rd offense</td>
<td>$35.00</td>
</tr>
</tbody>
</table>
Class 2 – Major violations $100.00
Class 3 – Legal violations $250.00

For more information go to Parking Violations Information (https://cms.ysu.edu/administrative-offices/parking-services/parking-violations/).

MAGG LIBRARY & CURRICULUM RESOURCE CENTER FINES & FEES

<table>
<thead>
<tr>
<th>Library Material Replacement Fee</th>
<th>Market Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Library Study Carrel Rental</td>
<td>$25.00</td>
</tr>
<tr>
<td>OhioLink Material Replacement Fee</td>
<td>$110.00</td>
</tr>
<tr>
<td>Overdue Closed Reserve Material Daily Rental (per day)</td>
<td>$0.55</td>
</tr>
<tr>
<td>Overdue Closed Reserve Material Hourly Rental (per hour)</td>
<td>$0.55</td>
</tr>
<tr>
<td>Overdue InterLibrary Material (per day)</td>
<td>$0.05</td>
</tr>
<tr>
<td>Overdue Maag/Depository Material (per day)</td>
<td>$0.10</td>
</tr>
<tr>
<td>Overdue OhioLINK Material (per day)</td>
<td>$0.50</td>
</tr>
<tr>
<td>Replacement Processing Fee</td>
<td>$10.00</td>
</tr>
<tr>
<td>SearchOhio (OhioLINK partner) Overdue fine (per day)</td>
<td>$0.50</td>
</tr>
<tr>
<td>SearchOhio (OhioLINK partner) Material Replacement Fee</td>
<td>$25.00</td>
</tr>
</tbody>
</table>

For further Circulation policy details, visit MAAG Circulation Policy (http://maag.ysu.edu/).

STUDENT FINES FOR VIOLATIONS OF THE STUDENT CODE OF CONDUCT

Alcohol abuse violations:
- First offense $75.00
- Second offense $125.00
- Third offense $175.00

Drug/controlled substance abuse violations:
- First offense $100.00
- Second offense $150.00
- Third offense $250.00

Failure to attend conduct hearing $25.00

Failure to complete disciplinary action $25.00

Restitution for lost/stolen/damaged property $50.00

Violation for drug sales or distribution $250.00
- Violation for theft $150.00
- Violation for violent or threatening behavior $150.00
- Violation for weapons $150.00
- Violations - Other up to $250.00

THE UNIVERSITY RESERVES THE RIGHT TO CHANGE ANY FEE WITHOUT NOTICE. PLEASE CHECK CAMPUS ANNOUNCEMENTS AND REVIEW CAMPUS WEBSITES FOR FEE CHANGES OR UPDATES. YOUR MYYSU EMAIL ADDRESS IS THE FORMAL MEANS OF COMMUNICATION.

Reduction/Refund of Fee Charges Upon Withdrawal

To withdraw from a single course or from all courses (complete withdrawal), it is necessary to access the registration functions online via the Penguin Portal – Registration. It is the student’s responsibility to confirm that the withdrawal was correctly processed and the course(s) is/are deleted. Nonattendance of class, or notification to the instructor or department, does not constitute official withdrawal.

If a student is permitted to withdraw from the University or if a student reduces his or her academic load, a refund of the tuition charge, and the nonresident tuition surcharge, where applicable, shall be made in conformity with the following schedule for regularly scheduled courses:

<table>
<thead>
<tr>
<th>Length of Course</th>
<th>100% Refund</th>
<th>No Reduction of Charges</th>
</tr>
</thead>
<tbody>
<tr>
<td>More than 8 weeks</td>
<td>Through 14th day of term</td>
<td>15th day of term and later</td>
</tr>
<tr>
<td>8 weeks or less</td>
<td>Through 7th day of term</td>
<td>8th day of term and later</td>
</tr>
</tbody>
</table>

Note: Because access to change of registration is now available online 24/7, every day of the week is counted (including weekends and holidays) when calculating tuition refunds.

If the student withdraws after the prescribed time limits (as indicated above), all tuition and other applicable fees and charges are forfeited. If fees were paid by scholarship, loan, or grant-in-aid, the appropriate credit is issued to the fund from which the initial payment was made.

If a student withdraws from a study abroad field course within the applicable add/drop period for that term, the student will be refunded the tuition portion of the course per the schedule above. However, the University is not able to guarantee, and does NOT guarantee, that any portion of the program fee for that course will be removed or refunded if the student withdraws from the program for any reason either during or after the close of the add/drop period. If the University has already paid or encumbered funds on the student’s behalf at the time of withdrawal, the student is obligated to pay the amount encumbered or paid by the University.

Title IV financial aid funds are awarded to a student under the assumption that the student will attend school for the entire period for which the assistance was awarded. If a student completely withdraws on or before the 60% point in time of the period of enrollment, calculated using calendar days, a portion of the federal aid awarded (Federal Pell, SEOG, Perkins Loans, Direct Loans, and PLUS Loans – but not Federal Work Study) may need to be returned according to the provisions of the Higher Education Amendments of 1998. This recalculation may result in the student’s owing a balance to Youngstown State University and/or the federal Department of Education.

Any withdrawal, or reduction in academic hours after the schedule outlined above will not be entitled to a reduction of charges and/or refund unless an Application for Involuntary Withdrawal is submitted and approved by the Fees and Charges Appeal Board. All decisions made by this board are final and binding.

Financial Aid, Scholarships, and Awards

Youngstown State University has a comprehensive program of financial assistance which includes scholarships, grants, work-study, and loans. Most of these programs are administered by the Office of Financial Aid and Scholarships.

Links to the following resources are conveniently located at the Office of Financial Aid and Scholarships’ website Financial Aid and Scholarships (http://www.ysu.edu/content/office-financial-aid-and-scholarships/).

1. Free Application for Federal Student Aid (FAFSA): A common form used to apply for federal and state need-based grant aid and student loans.
2. Youngstown State University Scholarship Search: An online search engine to locate and apply forYSU-specific scholarship funds offered through the Youngstown State University Foundation.
3. Youngstown State University Foundation Scholarship Application: An online form application which, upon completion, considers students for
Scholarships

Scholarships are gift aid awarded to students on the basis of superior academic performance or talent, other specific criteria as set forth by the individual donor, and/or on the basis of financial need. Scholarships do not have to be repaid. Amounts may vary depending on the academic ability, financial need, and/or the current state of funding or endowment support for the scholarship. Scholarship funds have been established at YSU by individuals, corporations, clubs, and both religious and fraternal organizations. In addition, the Youngstown State University Foundation administers endowments which provide substantial funding for numerous scholarship programs at Youngstown State University; including the Scholarships for Excellence program.

Scholarships awarded to current Youngstown State University students are based on the student’s academic record, character, and/or financial need. Scholarships for incoming freshmen are awarded on the basis of high school academic record, grade point average (GPA), scores on standard college entrance examinations, and in limited situations, class rank. Scholarship applicants are considered for all scholarships appropriate to their aims and interests.

To be considered for scholarships, students should complete all appropriate forms by their established due date each year. To search a complete listing of scholarships, visit the office website (https://ysu.edu/content/office-financial-aid-and-scholarships/). Additionally, students seeking consideration for need-based scholarships will also need to complete a Free Application for Federal Student Aid (FAFSA) found at studentaid.ed.gov/sa/fafsa (https://studentaid.ed.gov/gov/sa/fafsa/).

Scholarships for Excellence

Please check with the Office of Financial Aid and Scholarships for the most current scholarship information.

Scholarships for Excellence programs are awarded by the University and jointly funded by the YSU Foundation and the University. The YSU Foundation, with an endowment of over $250 million, is committed to providing the “edge of excellence” for the University, providing more than $8 million in scholarship assistance annually for YSU students. The Scholarships for Excellence programs are awarded to eligible new high school graduates, transfer students, and current students. Current and transfer students will automatically be considered for these scholarships. In addition, incoming freshmen should apply for admission by February 15 to be considered for these scholarships automatically.

Please note: Undergraduate Scholarships for Excellence program guidelines are subject to change. Students cannot be awarded more than one scholarship through the Scholarships for Excellence program.

Click the following link to view a current list of the Scholarships for Excellence (http://www.ysu.edu/content/office-financial-aid-and-scholarships/scholarships/).

YSU Foundation Scholarship Application

The Youngstown State University Foundation (YSUF) is an independent, non-profit organization that distributes resources from privately held funds to support YSU students through scholarships. The YSU Foundation is the designated philanthropic entity of Youngstown State University. Upon completion of the single application, students will be considered for a number of YSU Foundation scholarships. See the YSU Foundation Scholarship Application (https://cfweb.cc.ysu.edu/finaid/ysuf/ysuf_application.cfm) on the office website for additional information and to apply.

Other YSU Scholarships

For a listing of scholarship opportunities currently available to YSU students, go to the Scholarship Search (http://cfweb.cc.ysu.edu/finaid/scholar/est_scholar.cfm).

Students are also encouraged to explore these supplemental options for scholarship resources:

- Their particular college or department for academic specific scholarships
- Student's and/or parent(s)’ employer for scholarships or fee remission opportunities
- Local community resources for scholarship programs, such as church organizations and libraries
- Free internet web searches through sites such as Fastweb (http://www.fastweb.com/) or FinAid (http://www.finaid.org/)

Grants-in-Aid

Grants-in-Aid are gift monies that do not need to be repaid. The amount of grant aid awarded is determined by the recipient’s financial need and/or academic record and character. The following is a list of Grant-in-Aid funds a student could potentially qualify to receive:

- **Federal Pell Grant**: A need-based federal grant provided to eligible undergraduate students pursuing a first bachelor’s degree or associate’s degree. A FAFSA must be filed yearly to be considered for this grant.
- **Federal Supplemental Educational Opportunity Grant (FSEOG)**: A need-based grant funded by the federal government and awarded by YSU. Students who meet the eligibility requirements for the Federal Pell Grant, and meet the priority filing deadline of December 1 for new students and February 15 for continuing students, receive primary consideration for this campus-based aid program.
- **Ohio College Opportunity Grant (OCOG)**: Grant funds awarded by the State of Ohio to full-time, undergraduate students who are residents of Ohio and who are pursuing a first bachelor’s degree or associate’s degree. Eligibility is based on family income. The FAFSA must be completed by October 1 of each year to be considered for this grant.
- **Pennsylvania Higher Education Assistance Award (PHEAA)**: Grant funds provided to Pennsylvania residents who are YSU students. Students may be full-time or half-time undergraduates enrolled in an approved program of study requiring at least two years to complete. File the FAFSA by May 1 of each year to be considered for this grant.
- **YSU Foundation PHEAA Supplemental Grant**: Due to the legislative cap on Pennsylvania grants to Pennsylvania residents attending Ohio universities, YSU has initiated a supplemental grant program funded by YSU and the YSU Foundation. This grant will be automatically awarded to YSU students who are awarded and eligible to receive a PHEAA grant. The supplemental grant will be awarded in amounts up to 200% of the PHEAA grant, subject to availability of funds.
- **Veterans’ Administration Education Assistance**: The Department of Veterans’ Affairs provides education assistance to veterans or current armed service personnel. Programs include contributory plans, rehabilitation benefits, work-study, and dependent/spousal benefits. Contact the Office of Veterans Affairs at (330) 941-2503 or toll-free at 888-GI-BILL1 (888-442-4551).
- **Bureau of Vocational Rehabilitation Awards**: Programs funded by the Bureau of Vocational Rehabilitation in Ohio (BVR) and the Office of Rehabilitation Benefits, work-study, and dependent/spousal benefits.
Vocational Rehabilitation in Pennsylvania (OVR) that provide grants for tuition, fees, and/or books for residents with disabilities. Eligibility is determined by each state's Bureau.

- **Ohio War Orphans:** Grant funds for children of disabled or deceased U.S. Armed Forces veterans. There is a needs test required, the student must be an Ohio resident attending an Ohio college or university, and be under the age of 25 upon application. The grant pays a percentage of tuition and fees. For additional information, contact (614) 752-9528.

- **Ohio National Guard:** Provides grants paying for 100% of instructional and general tuition fees for members who are full-time undergraders. Apply through the National Guard. Pay close attention to deadlines. For additional information, contact (614) 336-7053

### Employment

To assist in paying for educational and living expenses, currently enrolled students in good standing may apply for on-campus employment. On-campus employment opportunities are posted online ([https://jobs.ysu.edu/](https://jobs.ysu.edu/)). Students are encouraged to check regularly for open positions.

**Federal Work-Study** is a need-based program that provides eligible students with funding for on-campus employment. Federal Work-Study students receive paychecks for hours worked and may utilize those funds toward educational and living expenses. To receive maximum consideration for this campus-based program, the FAFSA must be filed by the priority deadline of December 1 for new students and February 15 for continuing students with the student having answered “yes” to the question “Are you interested in being considered for work-study?” on the application.

### Loans

Loans are a form of self-help financial aid utilized by many students to help meet educational expenses. Borrowing responsibly is key as many loans have borrowing limits, accrue interest, and must be repaid.

- **Federal Direct Subsidized and Unsubsidized Stafford Loans:** The federally funded Subsidized Stafford Loan has its interest paid while the student maintains at least half-time enrollment. Federal Unsubsidized Stafford Loan interest accrues from the time the loan is first disbursed. (Note: Graduate students are only eligible for unsubsidized loans.) For a list of the most current interest rates on Stafford Loans, please see the [Federal Student Loan](http://www.ysu.edu/content/office-financial-aid-and-scholarships/student-loans/) page on the Office of Financial Aid and Scholarships website. Repayment of both types of Stafford Loans begins six months after graduation, separation, or enrollment of less than half-time. Student borrowers cannot exceed their designated annual loan limits and maximum total debt allowed by federal law (see the Office of Financial Aid and Scholarship’s website [http://www.ysu.edu/content/office-financial-aid-and-scholarships/student-loans/](http://www.ysu.edu/content/office-financial-aid-and-scholarships/student-loans/) for more information).

- **Federal Direct PLUS Loan:** This federally funded loan is for the parents of dependent, undergraduate students who are potentially eligible to borrow based on their credit-worthiness. Parents interested in this loan option should log into [studentaid.gov](http://studentaid.gov/) and complete the Parent PLUS Loan application for consideration. Repayment of the Federal PLUS Loan generally begins sixty days after the final loan disbursement of each academic year. Current interest rates on the Federal Parent PLUS loan can be found on the Federal Student Loan (http://www.ysu.edu/content/office-financial-aid-and-scholarships/student-loans/) page of the Office of Financial Aid and Scholarships website.

- **Federal Direct PLUS Loans for Graduate and Professional Students:** This federally funded loan is available to students who are enrolled in a graduate or professional program (a program that leads to a master’s or doctoral degree) and who have reached their annual Stafford Loan limit. Additional requirements include minimum half-time enrollment and good credit history as a credit check is required for approval. Repayment will begin within sixty days of the loan reaching full disbursement. Current interest rates on the Federal Direct PLUS Loan for Graduate and Professional Students can be found on the Federal Student Loan (http://www.ysu.edu/content/office-financial-aid-and-scholarships/student-loans/) page of the Office of Financial Aid and Scholarships website.

Please see the department’s website ([https://ysu.edu/financial-aid-and-scholarships/](https://ysu.edu/financial-aid-and-scholarships/)) for the most current information on all federal loan programs.

#### Part-time Students

Aid is available for part-time students, though the amount of part-time aid and the types of aid available vary. Be sure to file the FAFSA by December 1 for new students and February 15 for continuing students for maximum consideration. It is also recommended to check directly with the Office of Financial Aid and Scholarships to discuss how part-time attendance can ultimately affect a student's overall financial aid eligibility.

### Federal Verification

Students selected for verification are required to submit certain documentation to the Office of Financial Aid and Scholarships. Students should submit this requested documentation as soon as possible so that the processing of financial aid is not delayed. Even if the student initially applies on time, any delay in processing due to verification could result in that student not receiving financial aid that they may have otherwise been eligible to obtain. Processing typically takes up to 3 weeks, but can take longer during peak processing periods.

Keep copies of all tax forms, tax return transcript(s), and W-2 forms each year, as well as any documents or forms submitted to the Office of Financial Aid and Scholarships.

#### Submitting Tax Information

There are two ways to provide your tax information for the verification process:

1. Use the IRS Data Retrieval Tool provided on the FAFSA (recommended)
2. Provide a copy of your IRS Tax Return Transcript or signed copy of the IRS tax form 1040

Tax return transcripts can be ordered by calling 1-800-908-9946, or online ([https://www.irs.gov/individuals/get-transcript/](https://www.irs.gov/individuals/get-transcript/)).

#### Special Circumstances

If a student and/or their family have unusual circumstances that have occurred during the academic year, such as excessive medical expenses or a loss in income, contact the Office of Financial Aid and Scholarships to discuss the situation with a counselor.

### Satisfactory Academic Progress (SAP) Policy

Federal and State of Ohio regulations require that Youngstown State University review the academic progress of students annually, whether they are a previous aid recipient or not. SAP is evaluated during the spring semester. The purpose of this review process is to measure whether a student is making satisfactory progress towards his or her educational goals. All federal programs and the Ohio College Opportunity Grant (OCOG) are affected when a student is not in compliance with the Satisfactory Academic Progress Policy. (The Pennsylvania Higher Education Assistance Grant (PHEAA) is not governed by the Satisfactory Academic Progress Policy, but rather by the respective state).

YSU’s Satisfactory Academic Progress requirements for undergraduate and graduate students include the following three components:

1. **Grade Point Average (GPA)**

All students at Youngstown State University are required to maintain a minimum cumulative grade point average. Undergraduate students must maintain a minimum 2.0 GPA. Graduate students are required to maintain a 3.00 GPA. The following grades are included in the GPA calculation: A, B, C, D, and F. The GPA calculation excludes the following grades: CR-credit; NC-no credit; AU-audit; I-incomplete; W-withdrawal. For incompletes, the credit
hours apply to the term the student was enrolled, not the term the student was making up the incomplete. Students who wish to improve their cumulative GPA by repeating a course will be subject to a GPA recalculation. However, a recalculation will be made for only the immediately preceding grade for the course, regardless of the number of repeats, and may be made only once for any course.

Students academically suspended cannot receive federal aid during the period of suspension.

2. Max Time Frame

When a student's attempted hours reach 150% of the maximum hours needed to complete an associate (between 90 and 110 hours) or bachelor’s degree (between 180 and 216 hours), federal financial aid eligibility will be suspended unless the time frame is extended with an appeal accompanied by an Academic Advisor Evaluation. Graduate degrees must be completed by the length of time standards established and monitored by the School of Graduate Studies.

Please Note:

- All credit hours, including hours accepted as transfer credit, are included in the maximum time frame calculation regardless of the number of degrees a student chooses to pursue.
- All terms of attendance are reviewed including terms of remedial coursework or when no federal aid was received.

3. Percentage Completion

At the time of the annual assessment, completed hours as a percentage of attempted hours, must meet the following minimum requirements:

1. Freshmen (0-29 hours earned) must complete a minimum of 55% of the total cumulative hours attempted;
2. Sophomore (30-59 hours earned) must complete a minimum of 60% of the total cumulative hours attempted;
3. Junior (60-89 hours earned) must complete a minimum of 65% of the total cumulative hours attempted;
4. Senior (90+ hours earned) must complete a minimum of 70% of the total cumulative hours attempted;
5. Graduate (13+ grad hours attempted) must complete a minimum of 50% of the total cumulative hours attempted.

Percentage completion is calculated by dividing earned hours by cumulative hours attempted. For financial aid satisfactory academic progress purposes, attempted hours exclude audited hours and withdrawals made by the last date to receive a 100% refund. The following grades negatively impact the percentage completion calculation: F-failed; NC-no credit; AU-audit; I-incomplete; W-withdrawal. For incompletes, note that the credit hours apply to the term in which the student was enrolled in the course, not the term the student was making up the incomplete.

Transfer Students

Transfer students will be eligible for federal aid through the spring semester of the academic year they begin at YSU. During the spring semester, these students will be evaluated under the Satisfactory Academic Progress Policy. Transfer hours will be included in the number of hours earned and attempted, but only YSU grades enter into the GPA calculation.

Non-Degree Students (undergraduates, post-undergraduate, and graduate)

A student must be enrolled in a degree program to receive federal financial aid.

SAP Appeal Process

If a student is non-compliant, he/she must appeal the denial of financial aid by submitting an appeal form that explains the circumstances. Supporting documentation may be required to review conditions that can include: severe physical or mental illness or injury of the student or immediate family, death of a relative, or other mitigating circumstances. Appeals will be evaluated by the Satisfactory Academic Progress Appeal Committee, which will respond via email with the decision within 30 days, whether approved or denied.

Students who do not appeal, or who are denied by the Committee, will not be eligible for federal financial aid programs effective summer semester and until they satisfy all deficiencies without receiving federal student aid funds. Federal regulations require students who successfully appeal to be placed on a semester based Financial Aid Probation and Academic Progress Plan. At the end of the probationary term, the semester based grade point average, semester based completion percentage, and/or semester based academic action plan requirements must be met to receive federal aid for the subsequent semester unless across-the-board compliance with overall SAP established. The decision made by the Satisfactory Academic Progress Appeal Committee is final. As previously indicated, students can expect to receive an appeal decision via email within 30 days of the office receiving their Satisfactory Academic Progress Appeal form.

Financial Aid Refund Policy

The refunding of financial aid funds to the appropriate funding source corresponds to federal regulations, the Return of Title IV fund requirements and YSU's refund policy regarding student fees upon withdrawal from class(es). This policy is explained in greater detail in the Undergraduate Catalog.

Commonly Used Financial Terms

Cost of Attendance (COA): The total cost of attending school for one academic year, including direct costs (tuition, fees, room, and board) and indirect costs (books, supplies, transportation, and additional miscellaneous expenses).

Expected Family Contribution (EFC): The amount that a student and their family will be expected to contribute toward educational expenses, as determined by the federal government, based on the information supplied on the FAFSA. For more information regarding the formula used to determine the EFC, go to the “How Aid is Calculated” section of the Federal Student Aid website (https://studentaid.ed.gov/complete-aid-process/how-calculated/). Information on EFC calculations can also be obtained by calling 1-800-4-FED-AID.

FAFSA (Free Application for Federal Student Aid): A common form found online at studentaid.ed.gov/sa/fafsa (https://studentaid.ed.gov/sa/fafsa/) that a student (and parents when applicable) complete in order for the federal processor to determine the student/family EFC. The EFC is then used by YSU to determine a student’s overall financial need. FAFSA must be completed each year in order for a student to be considered for loans, grants, and certain scholarships.

Financial Aid: All forms of financial assistance which include gift aid (scholarships and grants), as well as self-help aid (work programs and loans).

Financial Need: The difference between the Cost of Attendance and the Expected Family Contribution.

Gift Aid: Aid, usually in the form of scholarships and grants, that does not have to be paid back.

Grant: Gift aid awarded to a student on the basis of financial need, and in some cases, academic performance and character. Grants do not have to be paid back.

Scholarship: Gift aid awarded on the basis of academic performance, talent, other unique criteria as established by the donor/organization, and/or financial need.

Subsidized: A subsidized loan is a need-based loan in which the government pays the interest while the student is enrolled at least half-time in school.

Verification/Documentation: The process by which YSU confirms the accuracy of the information supplied on FAFSAs each year as required by federal
regulation. If a student is selected for verification/documentation, they (and their parents when applicable) will be asked to supply the Office of Financial Aid and Scholarships with additional information and copies of documents such as W-2's and federal tax return transcripts.

Unsubsidized: An unsubsidized loan is not based on financial need. The borrower is responsible for all interest that accrues.

**Office Information And Hours**

**Mailing Address:**
Youngstown State University  
Office of Financial Aid and Scholarships  
One University Plaza  
Youngstown, OH 44555-3505

**Telephone:** (330) 941-3505  
**Appointment Line:** (330) 941-3506  
**Fax:** (330) 941-1659  
**Email:** yusufinaid@ysu.edu  
**Web address:** www.ysu.edu/finaid (http://www.ysu.edu/content/office-financial-aid-and-scholarships/)

**Office Hours:** Monday-Friday; 8:00am-5:00pm  
**Walk-in Hours:** Monday-Friday; 10:00am-12:00pm and 2:00pm-4:00pm

**Academic Policies and Procedures**

**Placement Tests**

New students may be required to take placement tests to determine their readiness for college-level work. If placement testing shows that students are not prepared for college-level work, they will be placed into one or more developmental courses in English Composition, Reading and Study Skills, and/or Mathematics. The Composition Placement Test, the ACCUPLACER® Reading Test, and the ALEKS® Math Test are required of all students unless there is an automatic placement or exemption due to ACT/SAT scores. Students who have AP credit or transfer coursework may not need placement testing. Students will be informed about what testing is needed when they are accepted for admission to the University.

Students who are required to take one or more placement tests must do so before advisement and registration.

**Composition Placement Test and ACCUPLACER Reading Test**

The Composition Placement Test and the ACCUPLACER® Reading Test are required of a student who has not been placed through ACT/SAT scores, or is not required to take the ACT/SAT test. No student is permitted to register for classes without having taken the tests, except those students placed into English classes for non-native speakers and those with approved transfer credit.

Students placing into the following developmental courses must complete the specified coursework within their first 36 semester hours. Otherwise, the student will be limited to enrolling only for those developmental classes until they are completed successfully.

**English Composition Requirement**

A student must complete the regular English composition requirement for graduation within the first 60 hours of coursework. A student who does not complete the English requirement within the first 60 hours of coursework will be prohibited from registering for any additional upper-division courses until the English requirement has been met. Transfer students having completed 60 hours or more are exempt from this policy for their first 12 hours of enrollment at Youngstown State University.

For more information about Placement Tests, please visit the Testing Center (http://cms.ysu.edu/administrative-offices/testing-center/testing-center/) website.

**ALEKS Math Test**

Students who have not been placed through ACT/SAT scores or are not required to take the ACT/SAT test must take the ALEKS® Math Test unless they have approved AP math credit or sufficient transfer coursework. Students will be placed into appropriate mathematics courses based on their ACT/SAT scores or the ALEKS® Math Test.

Please note that credit hours from the following developmental courses will not count toward a degree.

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<td>ENGL 1549</td>
<td>Writing 1 with Support</td>
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Conditionally admitted students placing into the following courses must take these courses within their first 20 semester hours.

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Students directed to enroll in the following courses must do so. The student may not withdraw from these courses unless he or she is making a complete withdrawal from the University.

None of the above-named mandatory developmental courses may be taken more than twice without the approval of the college dean. Should a student not successfully complete any of these courses within two attempts, or if he or she withdraws from them twice, the student will be unenrolled from the University.

Please note that credit hours from the following courses will not count toward a degree.

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For more information regarding math coursework, visit the Department of Mathematics and Statistics (http://www.ysu.edu/academics/science-technology-engineering-mathematics/mathematics-major/) website. For a sample math placement test, visit ACT.

**Foreign Language Placement Test**

Students in AB degree programs must satisfy a foreign language requirement for the degrees. Students in the BA and BM degree programs in the College of Creative Arts and Communication should consult with advisors in that college.

Students may enroll in any 1550 elementary foreign language course without taking the FLPT.

Students who wish to begin their college-level foreign language study with 2600 Intermediate or above to satisfy the requirement MUST take the foreign language placement test (FLPT).

Students with AP credit in a foreign language have completed the requirement. Students with transfer credit for college foreign language courses may enroll in the next course in the sequence.

Visit the Foreign Language Requirement (http://catalog.ysu.edu/undergraduate/colleges-programs/college-liberal-arts-social-sciences/) page for more information.

**Academic Advisement**

**Academic Advising Mission**

Academic advising at YSU is an integrated teaching and learning process built upon an ongoing interactive partnership between students and their advisors.

Academic advising supports students in developing a balanced scholastic plan that will provide them with a solid foundation for academic success and empower them to take responsibility for achieving their life-long educational and career goals.

(Adopted February 2010)

**Who Requires Academic Advising?**

Advisement is required for the following students:

- Freshmen (fewer than 30 hours)
- Post-secondary enrollment (College Credit Plus)
- Students not in good standing (warning, probation)
- First semester transfer students
- Returning former students
- Athletes

**Reasons to See an Advisor**

Academic advisors strive to support students as they navigate their way through college so they can reach their academic goals. Here are a few reasons why you might want to make an appointment to see an academic advisor:

- Need help understanding requirements to finish your degree
- Need an explanation of YSU academic policies and/or regulations
- Have questions about majors and/or minors
- Need assistance in the creation of an academic plan toward graduation
- Have academic difficulties and want to know where to find help
- Want to prepare for the application process to restricted majors such as nursing, dental hygiene, respiratory care, and social work
- Feel confused, overwhelmed, or generally unsure about what you should be doing
- Want to keep on the path to graduation

**What You Will Learn from Meeting with Your Advisor**

- You will gain an understanding of the requirements of your major
- You will learn about the University requirements to obtain a degree, including:
  - General Education requirements
  - Upper division requirements
  - Total hour requirements
  - Minor requirements
- You will be informed of relevant University policies and learn to navigate them, including:
  - Changing majors
  - Withdrawing from classes
  - Warning, probation, and suspension policies
  - Course repetition
  - Degree audit
  - Application for graduation audit
  - Graduation application
- You will learn about and be referred to relevant campus resources (as needed)
- You will learn to make short-term and long-range plans for your college career that will supplement your career and life goals
- You will understand how your curriculum and college experiences relate to your future career goals

**College Advising Offices**

- Beeghly College of Liberal Arts, Social Sciences and Education (BCLASSE) Advisement Beeghly 330-941-3268; Advisement Debartolo 330-941-3413
- Bitonte College of Health and Human Services (BCHHS), Cushwa Hall, Room 2104, 330-941-1820
- Cliffe College of Creative Arts (CCCA), Bliss Hall, Room 2324, 330-941-3625
- College of Science, Technology, Math, and Engineering (STEM), Moser Hall, Room 2325, 330-941-2512
- Williamson College of Business Administration (WCBA), Student Services Center, Room 1115, 330-941-2376

**What to Expect from Your Academic Advisor**

Your academic advisor will:

- Assist you in exploring areas of study on your way to choosing your major
- Encourage and support you in establishing your goals and tracking your progress toward those goals
- Provide a safe setting for you to share your thoughts, goals, and concerns
- Listen to your questions and concerns and provide resources and referrals as needed in order to facilitate your college experience
- Understand and explain YSU policies and procedures, general education requirements, academic programs, and student services
- Maintain confidentiality

**What Your Academic Advisor Expects from You**

In order to have a successful advising experience, you must:
• Accept responsibility for your decisions and actions
• Research your areas of interest including YSU programs and degree requirements
• Plan ahead (schedule appointments early and have the courtesy to cancel or reschedule as necessary)
• Come prepared for your advising appointment with your questions and concerns
• Follow up on referrals and inform your academic advisor of the outcome of the referrals
• Use all available campus services as necessary (Math Lab, Writing Assistance Center, Counseling Services, Center for Student Progress, Career Services)

Registration

All YSU class registration takes place online through the Penguin Portal. Registration dates and appointment times for current students are published on the Penguin Portal.

A regularly admitted student is considered current if he/she is enrolled past the 14th day of the term. For courses that are 8 week or less, the student will be considered current if he/she is enrolled past the 7th day of the term.

Students who are considered current for the term, but do not register for the next term, will still be notified for registration for two subsequent terms. A student is no longer current if they have not attended for 3 consecutive terms.

Registration must be concluded no later than the date published for the particular term. All significant dates for each term are published in the catalog and on the YSU website.

Advisement

The Office of the Registrar provides instructions for advisement and registration prior to registration.

All students are urged to consult with advisors in their major area. Each department or college has a procedure for either assigning an advisor to a student or having the student select an advisor. Advisement is required for the following students:

1. Freshmen (with fewer than 30 hours of credit)
2. Post-Secondary Enrollment Option/Early Admission Options Program students
3. Any student not in good standing
4. First-semester transfer students
5. All former students returning to the University
6. Athletes

The responsibility for fulfilling all requirements rests ultimately upon the student; the advisors provide assistance in that process.

Students may use the online Schedule of Classes to determine the specific classes offered in a particular term. For information about future offerings or when a particular course will be offered again, consult the appropriate department.

Change of Registration

Registered students may change their registration by accessing the registration functions through the Penguin Portal. (Also see Reduction/Refund (p. 20) of Fees (p. 20) section).

Students should consult their advisors prior to changing their schedules. In general, each student who needs an advisor’s approval for registration must also have an advisor’s approval for add/drop (change of registration). However, advisors’ approval is not required for:

• withdrawing from a course(s)
• changing sections of a course
• changing physical activity courses

A registered student may add an additional course through the change-of-registration procedure until the last day to add a class as published in the academic calendar.

Withdrawal from a course must be accomplished through the change-of-registration procedure. If a student withdraws from one or more courses during the full-refund period (or the end of the first week of the summer term), no entry will be made on the student’s permanent record for the course(s) dropped.

Administrative change(s) of registration may occur if a student is improperly enrolled in any course or has registered for more hours than permitted.

Students who wish to completely withdraw from the University should consult the appropriate section in this catalog.

Cancellation of Registration

A student’s registration may be cancelled for any of the following reasons:

1. Academic suspension for the previous term
2. Disciplinary action against the student
3. Insufficient class enrollment
4. Failure to meet admission or prerequisite requirements
5. Failure to satisfy past-due financial obligations to the University
6. Conditional Admission dismissal

For more information check the Office of the Registrar (http://cms.ysu.edu/administrative-offices/registrar/registrar-home/) website.

Credit Hours/Class Standing/Majors

In all cases, learning in for-credit courses is guided by a qualified instructor and includes regular and substantive student-instructor interaction.

The class hour is a weekly 50-minute class period and is the basic unit of instruction. The term “semester hour” (s.h.) signifies one class hour a week carried for one 15-week semester (or the equivalent in a summer term or flexibly-scheduled class). A semester hour of credit is the amount of credit given for one semester hour successfully completed. Each semester hour of credit represents an average of three hours of study and instruction every week through the term.

Alternatively, a web-based semester hour will be defined as the learning that takes place in at least 45 hours of learning activities, which include time in reviewing lectures or class meetings online, laboratories, examinations, presentations, tutorials, preparation, reading, studying, hands-on experiences, and other learning activities or a demonstration by the student of learning equivalent to that established as the expected product of such a period of study.

Maximum/Minimum Credit-Hour Value

Registration is not permitted for less than the approved credit hour value of any course as listed in the Undergraduate Catalog. Students may not register for more than the approved credit-hour value of a course.

Variable Credit Hours

Certain courses have variable credit hours. A student wishing to register for such a course may do so only after consulting with the department offering
the course to determine the number of hours for which to register. The last day to add a class is also the last day to change credit hours.

**Student Load**
The semester hours of credit a student carries per term depend on the degree sought and on the curriculum being followed. A minimum of 120 semester hours must be satisfactorily completed to earn a baccalaureate degree; a minimum of 60 semester hours for an associate degree. Students expecting to complete a bachelor’s degree in four years or an associate degree in two years should average 16 credits per term. Students interested in taking 21 credit hours or more per term must seek approval from the dean of their college.

**Full-time Status**
A full-time undergraduate student is one carrying 12 or more hours for credit per term.

**Academic Classification**
All students working for any undergraduate degree conferred by this University are ranked in classes, by semester hours completed, as follows:

<table>
<thead>
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<th>Class</th>
<th>Semester Hours of Credit</th>
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<tbody>
<tr>
<td>Freshman</td>
<td>0-29</td>
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<tr>
<td>Sophomore</td>
<td>30-59</td>
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<td>Junior</td>
<td>60-89</td>
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<td>Senior</td>
<td>90 or more</td>
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For purposes of satisfying course prerequisites, the term “senior standing” may be defined by reference to the specified curricula of a given school or college, if it provides detailed programs leading to the attainment of a degree. A student who has completed a four-year degree and who continues undergraduate enrollment is classified as post-baccalaureate.

**Majors**

**Declaring or Changing a Major**
A student may enter the University as an undetermined major.

A major and minor (if required) must be declared by the time the student has completed 63 semester hours.

In order to change or declare a major, the student must fill out a form from the department of the desired major. The approved form will be forwarded to the Office of Records.

Students who need help selecting a major should contact an academic advisor, the academic department, or the Office of Career Services for assistance with academic and career planning.

**Additional Majors and Degrees**
A student interested in pursuing more than one major at a time should contact the departments offering majors to be assigned an advisor for each program. Multiple majors or degrees may be awarded concurrently.

**Multiple Majors/single Degree**
A degree – e.g., Bachelor of Science, Bachelor of Arts – may be awarded only once. However, more than one major for the degree may be posted on the transcript when the appropriate department chairpersons certify completion of the requirements. The student should indicate in each of the appropriate colleges each major completed when filing for graduation. When the student completes more than one major in a given degree, one diploma is awarded. A minimum of 30 semester hours or 50% of the credits counted towards a major, whichever is less, must be specific to that major and not shared by any other major.

**Multiple Majors/Multiple Degrees**
If a student wishes to complete the requirements for multiple majors that are awarded under different degrees, the student must fulfill all requirements for each major and each degree. The appropriate chairpersons and deans must then certify completion of the requirements for each major and degree. The student must file intent to graduate and graduation application forms for each major and each degree in the appropriate colleges. A minimum of 30 semester hours or 50% of the credits counted towards a major, whichever is less, must be specific to that major and not shared by any other major.

Students may not earn the Bachelor of General Studies concurrently with another bachelor’s degree. Students who hold a bachelor’s degree are not eligible for a Bachelor of General Studies degree.

Any student who has completed a second degree from YSU must complete a minimum academic residency of 20 semester hours for an associate degree and 30 semester hours for a baccalaureate degree, meet all requirements for the second degree, and complete the requirements for a new major. Students coming from another university or from YSU with an already-completed bachelor’s degree will not have to complete any additional general education requirements at YSU but will have to satisfy the residency requirements described above.

**Credit from Professional Schools**
Students at YSU wishing to enter professional schools with the option of completing their baccalaureate degree in absentia may do so with the completion of at least 94 semester hours of coursework, which must include the following:

- All general University requirements
- Completion of major
- Completion of minor (if required)
- 54 s.h. of upper-division coursework (3700-4800-Level)

The University will accept the completion of not more than 30 semester hours from any professional school granting any of the degrees listed below and approved by the accrediting agency of that profession, provided that the student has been accepted for further study at the professional school. The student may thus secure the baccalaureate degree after three to three-and-a-half years in the University followed by approximately a year in the professional school. The relevant professional degrees are:

- Doctor of Dental Surgery or equivalent
- Doctor of Medicine
- Doctor of Osteopathy
- Doctor of Podiatry
- Doctor of Veterinary Medicine
- Doctor of Jurisprudence or equivalent
- Doctor of Ministry or equivalent
- Bachelor of Divinity or equivalent

The policy above does not apply to students admitted in the BS/MD Integrated Program of Youngstown State University and the Northeast Ohio Medical University (NEOMED). However, credit of up to 13 s.h. may be granted toward the completion of the BS degree to those students who have participated in the 6th year Human Values in Medicine Programs of NEOMED.

**Undergraduate Preparation for Post-Baccalaureate Degrees**
Medical schools have specific requirements for pre-medical study, and many law, theological, technological, and graduate schools have curriculum requirements for those seeking admission. Anyone wishing to enter a professional, technological, or graduate school of any kind should consult advisors in the appropriate undergraduate college of this University as early as possible. Such special needs can usually be met within the degree requirements of Youngstown State University, but the proper selection of courses may have to begin in the first year.
Courses

Prerequisites

No student may receive credit towards graduation for a course that is a prerequisite for a more advanced course which the student has already successfully completed, unless an exception to this policy is recommended by the appropriate chair and approved in writing by the student’s academic dean.

Course Repeat

A student may repeat a course once, unless otherwise stipulated in the course description or unless an additional repetition is authorized by the student’s academic dean. If the course is a prerequisite to another course, the repetition must be successfully completed before the other course is taken. Both the original course and the repeated course must be taken at YSU. Transfer, study abroad, and/or transient courses are not eligible to be used as a repetition. If the student has received credit for a more advanced course in the same subject, a repetition is treated merely as another course, along with the first, in calculating the point average, unless the student secures an approved repetition form for recalculation of point average from the dean of the college in which the student is enrolled. (See Recalculation of Point Average (p. 43)). A course repeated, however, may be counted only once as credit toward a student’s total academic hours for graduation.

The Repetition form and the Petition for a Late Withdrawal cannot be used for the same course. In other words, a Petition for a Late Withdrawal cannot be processed for any course that was repeated and a recalculation of point average processed and posted on the student’s academic record.

Credit towards graduation will not be given for a course on the semester system if the student has credit for the equivalent course on the quarter system.

Closed Classes

Departments set limits to the number of students that can be accommodated in each section. During the registration period or the period for adding courses, many classes become filled. These classes are called “closed,” which means that no more students will be admitted to them. Only the chair of the department offering the course can admit a student to a closed class or reopen a closed class.

Audited Courses

A student may audit any course. The student pays the full tuition, as well as any other applicable fee, for the course(s) audited. Audited courses are carried in a student’s load only for fee purposes. A student receiving financial aid should confer with the Office of Financial Aid and Scholarships before electing to audit a course.

A student may not change registration from audit to credit status or from credit to audit status after the last day to add a class.

Conference Courses

Conference work is available only in exceptional cases and if the academic advisor considers conference work essential. You must obtain the required approval(s) and complete the registration on-line.

Conference courses have the following restrictions:

1. Permission is limited to seniors with a 3.00 average. Exceptions must be approved by the dean of the college in which the student is enrolled.
2. The course must be given by a full-time faculty member.
3. A brief description of the plan of procedure must be given by the full-time faculty member.

Graduate Courses for Undergraduates

An undergraduate student who has senior standing and an unrecalculated grade-point average of at least 2.7 may enroll in 5800 or higher level graduate courses, provided such enrollment does not cause the total schedule for the term to exceed 15 semester hours. Before registering for courses, the student must have the approval of the student’s advisor in the program where the credit will be applied, the course instructor, and the dean of the College of Graduate Studies. The credit earned may be used for graduate credit at YSU only after the student is admitted to the College of Graduate Studies and the credit is accepted by the department in which the student continues graduate work. (Such coursework cannot count toward fulfillment of the requirements for a bachelor’s degree.) The maximum amount of such credit that will be accepted at Youngstown State University is nine hours.

Transient Student Authorization

Current YSU students desiring to attend another institution as transient students must complete and submit the Transient Student Authorization (TSA) form, available from the dean of the college in which they are enrolled. Instructions are on the form. To be certain the transient class is applicable to the degree, the TSA form must be completed prior to taking the course. If the form is completed after the course is taken, applicability cannot be guaranteed.

To receive credit for approved coursework, the student must have received a grade of ‘C’ or better and must attend Youngstown State University the semester following the completion of the transient term. It is the student’s responsibility to have an official transcript sent from the other institution to the YSU Office of Admissions.

Complete Withdrawal From The University Procedure

The student who wishes to withdraw from all courses in a particular term must access the registration system on the Penguin Portal or come to the Office of the Registrar. Any student receiving Title IV financial aid should seek advisement from the Office of Financial Aid prior to processing a complete withdrawal. A complete withdrawal may be executed before classes or after the term starts. The student should consult the Penguin Portal for deadlines.

Student withdrawal from any or all courses is permitted through the 60% period of any term or part of term. If a student does not meet this deadline, he/she shall be considered committed to completing all remaining courses. If a student is unable to complete a term or part of term due to extreme circumstances that occur after the stated deadline, the student should consult their college dean. In such circumstances, the dean’s decision regarding approval or denial of withdrawal shall be final and non-appealable.

A grade of ‘W’ shall appear on a student’s academic record for any withdrawal(s) processed after the 14th day for any courses that are greater than 8 weeks through the 60% period of the term or part of term. For all courses that are 8 weeks or less, a grade of ‘W’ shall appear on a student’s academic record for any withdrawal(s) processed after the 7th day through the 60% period of the term or part of term. The 60% period shall be determined by the University Bursar and reflected on the academic calendar.

The last day to add a class for any term or part of term that is greater than 8 weeks will be the 8th day of the term or part of term. The last day to add a class for any term or part of term that is 8 weeks or less will be the 4th day of the term or part of term.
Eligibility for Future Registrations

- A new applicant who withdraws from all courses prior to the 14th day of the term will not receive notice for future registrations unless the person requests that the Office of Admissions defer the application to a future term.
- A former YSU student who withdraws from all courses prior to the 14th day of the term will not receive notice for future registrations unless the person requests that the Office of Records defer the application to a future term.

Grading System

Faculty assigns grades on the basis of achievement in the subject matter of the course and in accordance with accepted professional standards for that subject. The grade earned by a student thus represents the quality of work and is not based merely on competition within the class.

- The grade of A represents exceptional work in which the student shows that he or she has firmly grasped and achieved the objectives of the course.
- The grade of B indicates very good work and considerable grasp of the essentials of the course.
- The grade of C indicates good work and a usable grasp of the essentials of the course.
- The grade of D indicates a definite, but not necessarily coherent, knowledge of the course.
- The grade of F indicates that the student has not achieved even a minimum grasp of the essentials of the course. This grade can also result from failure to withdraw officially from a course (see Change of Registration (p. 40) and Refund of Fees Upon Withdrawal) (p. 20).

An incomplete grade of I may be given to a student who has been doing satisfactory work in a course but, for reasons beyond the control of the student and deemed justifiable by the instructor, had not completed all requirements for a course when grades were submitted. A letter grade may not be changed to an I (Incomplete) after the term has ended and grades have been recorded. A written explanation of the reason for the I must be forwarded by the instructor to the Office of Records. This explanation will be included in the student’s permanent record, with copies to the student and department chairperson. For fall term courses, the final date to complete an I will be March 1 of the following term; for spring term courses, September 1; for all summer term courses, October 1. With approval by the instructor and the dean of the college in which the course is taught, the completion date may be extended. Courses not completed by the appropriate date will be converted to an F.

Students should not register for the same course the subsequent term. Rather, the student should work individually with the instructor to fulfill the course requirements. The instructor will initiate a grade change upon completion of the course requirements. If no formal grade change occurs within the allotted time frame, the I automatically converts to an F. Any I that is still pending by graduation will be converted to an F.

If a student receives an I as a result of being summoned to active military duty, the student will have one academic year from the date when he or she is released from active duty to complete the course requirements and have the change of grade recorded. It is the student’s responsibility to inform the registrar or associate director of records regarding the Incomplete grade.

Department chairs are granted authority to convert grades of I into final grades in cases where instructors may have severed connections with the University or have been otherwise unable to convert the grades.

A progress grade, PR, is given in certain approved courses to indicate that work is still in progress on a project that occupies more than one semester. This grade is changed to a final letter grade at the end of the term in which the work is completed.

The PR grade may also be given at the end of a term in courses specifically identified as competency-based to indicate that the student needs more time to demonstrate a mastery of the subject matter. In such instances, the PR grade will be converted to a letter grade by the instructor no later than the end of the subsequent term, excluding the summer. A PR grade not changed by this time is automatically converted to an F grade.

W represents a withdrawal properly processed within the period established for each semester. A grade of “W” shall appear on a student’s academic record for any course withdrawal(s) processed after the 14th day of the Fall or Spring semester through the 60% period of the semester. For summer semester courses, a grade of “W” shall appear on a student’s academic record for any course withdrawal(s) processed after the 7th day of a session through the 60% period of the session. For courses involving foreign travel, the last day to drop a course with a W shall be the date at which the student first leaves the campus to begin the travel. Withdrawal after the designated date (or an improper withdrawal) is recorded as F. Withdrawal thereafter (or improperly done, at any time) is recorded as F. Petitions for late withdrawal must be submitted within one year from the time a grade in the course was earned. If the grade resulted from circumstances over which the student had no control, the student may petition the appropriate dean for a late withdrawal.

A Petition for Late Withdrawal and the Repetition Form cannot be used for the same course. In other words, Petition for Late Withdrawal cannot be processed for any course that was repeated and a recalculating point average processed and posted on the student’s academic record.

When withdrawals change a student’s status (full-time to part-time), the student immediately forfeits any privileges contingent upon full-time status, and all interested parties which legally require it will be notified.

The distribution of achievement levels, and therefore of grades, in a large unselected group of students generally follows the normal frequency curve, in which 5% to 10% are A’s, 20% to 25% are B’s, 40% C’s, 20% to 25% D’s, and 5% to 10% F’s. However, since it is likely that substantial variation from the normal will occur in individual classes, the instructor does not use the ‘curve’ as a standard to be imposed, but only as a model against which the instructor may compare each particular class, using his or her own judgment on the basis of professional standards.

Instructors may use plus and minus modifications of the grades, but they are not recorded or used in calculating the point average.

The Point Average and Scholastic Standing

The student’s scholastic standing is indicated by the quality point average (also called “grade point average,” “grade average,” or “point average”).

For determining this average, every grade has a quality point value for each semester hour it represents, as follows:

- A, four quality points
- B, three points
- C, two points
- D, one point
- F, zero points

For example, an A in a three-hour course is worth 12 quality points; a D in a four-hour course, four points; and an F in any course, zero points. To find the point average, the total number of quality points earned is divided by the
Grading System

Currently enrolled and have successfully completed at least 15 semester hours has a point index of 2.50. Only grades of A, B, C, D, and F are included in the calculation of the point average.

Grading Options

Traditional Grade (A,B,C)/No Credit
To receive credit for courses offered on a traditional grade/no credit basis, a student must earn a grade of C or better. If the student fails to do so, an NC is entered on his or her transcript.

An NC does not fulfill the requirements for satisfactory completion of the course; it does not affect the grade point average.

Audit (AU)
The AU grade indicates a student has registered for a course on an audit basis and has met the audit attendance requirement established by the instructor. Failure to meet the attendance requirement results in a grade of AU (W).

Students must indicate their election of the audit grading option at the time of registration or within the time limits established for adding a class. The audit option will not be changed to the standard grading option beyond the last day to add a class.

Credit/No-Credit (CR/NC)
Credit/no-credit grades are given in some specific courses as approved by the Academic Senate. Such courses are identified in the course descriptions.

Credit/No-Credit (CR/NC) (Student Option)
To encourage students to experiment with courses outside their major field of concentration, a credit/no-credit policy exists within the following guidelines.

• Youngstown State University students who have completed at least 15 semester hours of credit and have a grade point average of 2.00 or better, or transfer students admitted unconditionally who have at least 30 semester hours of transfer credit, may elect to take a course for credit/no-credit.

• The grade recorded for the student is not a letter grade, but either CR (credit) or NC (no-credit). If a student who has opted for CR/NC earns an A, B, or C in the class, the grade officially assigned is CR; otherwise it is NC.

In either case, the grade point average is not affected.

• This option may be elected for a maximum of twelve (12) semester hours for the baccalaureate degree or six (6) semester hours for the associate degree. Courses offered only under the CR/NC option (by department designation) do not count as a student-elected credit/no credit class.

• Students are restricted to taking one CR/NC course per fall and spring semester and one CR/NC course per non-overlapping summer term.

• Courses taken under the CR/NC option may not be counted toward a student’s major or minor. Students should confer with their advisors prior to electing the CR/NC option.

• Students must indicate their election of the CR/NC option at the time of registration or within the time limits established for adding classes. The CR/NC option will not be changed to the standard grading option beyond the last day to add a class.

Changing of Grading Options
You may change your grading option only through the last day to add a class.

Excluding Older Grades (Statute of Limitations)
A degree-seeking undergraduate student who re-enrolls at Youngstown State University after an absence of five or more calendar years may be eligible for academic forgiveness. At the time of the petition the student must be currently enrolled and have successfully completed at least 15 semester hours with a grade-point average of no less than 2.00 following his or her return.

An absence is defined as a period of time in which no enrollment activity (i.e. attempted or earned academic credit) is posted to a student’s record.

To request academic forgiveness an eligible student may petition the dean of his or her college to exclude from the calculation of the grade-point average grades earned five or more calendar years before. If the petition is approved, all grades (not merely grades of D and F) earned during the specified quarter or semester and all previous grades (not merely grades of D and F) will then be removed from the calculation. However, all grades remain on the permanent record.

Excluded course credit will not count toward the total hours required for graduation. However, courses passed may fulfill general education requirements and may satisfy prerequisites for higher courses where applicable. Courses excluded may be taken again and repeated once without infringing upon repeat privileges specified in catalog course descriptions. Courses excluded are not subject to credit by examination. A student whose petition has been approved is ineligible for graduation honors. Only one petition from each student may be approved and is irreversible once it is applied. A student who has earned a degree or certificate from YSU may not petition for academic forgiveness.

Grade Reports
Final grades are available through the Penguin Portal.

Grade Changes
A request for a grade change must be made to the course instructor. Applications for grade changes must be signed by the instructor, department chair, and dean. All grade changes must be submitted by the dean or the instructor to the Office of Records; they will not be accepted from the student. After a degree has been conferred, in no case may a grade change be made for a course or courses taken while pursuing that degree.

A student’s academic record contains a complete history of his or her academic performance while earning a degree. Therefore, the academic record of a student who graduates may not be revised using a Grade Change Form, Repetition Form, Petition for a Late Withdrawal, or Statute of Limitations.

In the case of a student who has completed an associate degree, the above policy may, on occasion, be waived, but only if the student is currently pursuing a baccalaureate degree. However, changes cannot be made in a student’s record which would affect the status of the awarded associate degree. Waivers must be approved by the appropriate dean.

Credit by Examination-Departmental
A currently enrolled student who can demonstrate ability and knowledge in a particular subject area may establish credit in certain courses without enrolling in them, by taking a special examination (through the appropriate department). An examination fee is assessed for each examination. The only grade possible is “CRX”, and there is no effect on the student’s grade point average. For the examination fee, see “Fees and Expenses”. Information on courses for which credit by examination is possible may be obtained from the student’s academic dean or the Office of Testing (http://cms.ysu.edu/administrative-offices/testing-center/testing-center/). Registration for departmental tests is done through the specific department.

Repetition of Courses & Recalculation of GPA
A current undergraduate student may wish to improve his or her cumulative point average by repeating a course in which a grade of ‘D’ or ‘F’ was earned.

In order to recalculate the cumulative point average, the repetition must be consistent with the policy on course repeats, and the student must initiate the recalculation process with the approval of his or her advisor (or the dean, if it is a second repetition). A recalculation will be made for only the immediately preceding grade for the course, regardless of the number of repeats, and may
be made only once for any course. Although courses are not deleted from the permanent record, the record is adjusted to reflect the inclusion of only the last grade in the computation of the point average. The hours credited toward degree hours completed are those earned with the last grade.

Only undergraduate students currently attending the University may request this recalculation privilege, and only courses taken at Youngstown State University may be used in recalculating the cumulative point average. A post-baccalaureate student is not eligible to petition for a recalculation unless both the course and the repetition are completed subsequent to the conferring of the degree. A student holding the associate degree may petition after receiving the associate degree only if currently pursuing a baccalaureate degree. All YSU grades, including those deducted from accumulative totals as a result of an approved Repetition Form, will be counted in determining honors for graduation.

Absence from Classes and Examinations

The problem of excessive class absence concerns instructor and student, and consequently requires their mutual effort. All students must realize that for their own welfare they are expected to attend all class meetings of courses in which they are enrolled.

The instructor, however, has the prerogative of determining the relationship between class attendance, achievement, and course grades, and the responsibility for communicating the relationship to the students at the beginning of each term.

A student must have the instructor’s consent in order to take any examination at a time other than that scheduled.

The faculty believes that classroom activities are essential to learning. The student is responsible for knowing and meeting all course requirements, including tests, assignments, and class participation, as indicated by the course instructor.

The responsibility for work missed during absence rests with the student. The instructor has no obligation to give make-up graded coursework or to review course instructor.

The problem of excessive class absence concerns instructor and student, and consequently requires their mutual effort. All students must realize that for their own welfare they are expected to attend all class meetings of courses in which they are enrolled.

A student must have the instructor’s consent in order to take any examination at a time other than that scheduled.

The faculty believes that classroom activities are essential to learning. The student is responsible for knowing and meeting all course requirements, including tests, assignments, and class participation, as indicated by the course instructor.

The responsibility for work missed during absence rests with the student. The instructor has no obligation to give make-up graded coursework or to review other class work missed by a student as a result of absence except under those specific conditions cited below:

- Participation in University-sponsored activities. University-sponsored activities are those that are scheduled by academic, student affairs, and athletic units. They include, but are not limited to; intercollegiate athletic competitions activities approved by academic units, including artistic performances; R.O.T.C. functions; academic field trips; professional conferences; and special events connected with coursework.

- Government-required activities, such as military assignments, jury duty, or court appearances.

- Religious observances that prevent the student from attending class.


- Documented personal illness.

Procedure

The following guidelines describe procedures for students, sponsors of appropriate activities, and instructors.

Students shall:

- Provide all scheduled activity dates to their instructors at the start of the semester. For unforeseen absences, notify the instructor as early as possible in the semester of the upcoming activity.

- In the case of a University-sponsored event, provide the sponsor of the activity with a list of classes that conflict with the proposed activity.

- In the event the absence was due to illness or injury, verification from a health center or medical professional should be presented to the instructor. If the illness was not severe enough to warrant a medical visit, instructors should use their best judgment in determining if it should be excused.

- Be responsible for all material covered in class during their absence. Students are responsible for completing any work resulting from their absence. In no case is an excuse from class to be interpreted as a release from class responsibility.

- Out of courtesy, remind the instructor of the absence approximately one week prior to the absence.

Sponsors of University-sponsored activities shall:

- Provide each participating student with a signed letter for each of the student's affected classes, to be given to their instructors, including time, date, and location of the event. This letter should be provided at the beginning of the semester, or as early as possible in the semester.

- Address any concerns a faculty member might have related to the scheduled activity.

Instructors shall:

- Inform the student about graded coursework that will be or was missed.

- Determine an alternative due date for graded coursework missed.

Grade Requirements

Four categories of academic standing are established: Good Standing, Warning, Probation, and Suspension. These categories are intended to signify a student’s progress toward graduation or to provide an opportunity for making improvements and achieving academic success.

"Warning" and "Probation" indicate that grade standards consistent with graduation requirements are not being met. An advisor's approval of course load is required prior to continuing studies at the University.

"Suspension" means that a student is separated from the University for a period of time.

Academic standing is based upon the total earned hours (TEH) completed, including accepted transfer hours. YSU requires all students to have a cumulative GPA of 2.00 to be in good standing.

A student whose point average falls below the specified average for the number of credit hours achieved will be given a warning.

Students on academic warning are required to establish an action plan for academic success and have a letter of support from a supervisor as per the existing student employment policy.

A student who has been on warning and who fails to bring the average up to the minimum by the end of the following term will be placed on probation for the next term. A probationary student who has failed to bring the average up to the minimum by the end of the probationary term will be suspended; however, a student who makes substantial improvement during a probationary term and averages at least 2.00 for that term will be continued on probation even though the student’s cumulative average does not reach the desirable minimum.

A student on warning is permitted to participate in University activities.

A second suspension will have a duration of at least one full year before reinstatement on probation. Students should not expect to be reinstated after two suspensions unless the dean agrees that extraordinary conditions or circumstances have occurred. Additional suspensions will have durations of at least two years.

Reinstatement after any suspension is determined by the dean (or designee) of the college from which the student was suspended, or, if the student wishes to
change colleges, by the dean of the new college. Exceptions to the suspension policy may be granted by the dean.

Transfer students admitted in good standing or on probation must meet those point-average requirements indicated for their total hours, including transfer hours accepted by Youngstown State University.

Transcripts
The official transcript is a record of all coursework taken at Youngstown State University.

Current and former students, as well as alumni, can request an official transcript for academic work completed at Youngstown State University. Please be aware that only the student may request an official transcript. An official transcript will only verify YSU courses completed.

Transcripts may be ordered online at the YSU website (http://cms.ysu.edu/administrative-offices/registrar/transcript-request/) or in person.

Students are advised that most graduate and professional schools and many employers accept transcripts only if sent directly by the University. Photo identification is required when ordering the transcript in person. Transcripts will be released only for those students who do not currently have a financial obligation to the University.

The files maintained by the Office of Student Conduct are separate from transcripts, which are maintained by the University Registrar. If a student is expelled from the University due to a violation of The Student Code of Conduct, the expulsion is noted on the student’s official transcript indefinitely and cannot be removed. Students who have been suspended due to misconduct and request an official transcript during the time period of their suspension may have an addendum added to their transcript at the discretion of the Office of Student Conduct. This addendum will be removed once the period of suspension elapses.

A student’s academic record contains a complete history of his or her academic performance while earning a degree. Therefore, the academic record of a student who graduates may not be revised using a Grade Change Form, Repetition Form, Petition for a Late Withdrawal, or Statute of Limitations.

Academic Honors
The Dean’s List
The Dean’s List (for each term except summer) includes those full-time undergraduate students who have earned at least a 3.4 average for not less than 12 semester hours of credit in the semester just ended.

Included in the listing for the spring term are those part-time students who have earned at least a 3.4 average for the fall and spring terms, and who have accumulated a minimum of 12 hours of credit.

The President’s List
The President’s List (for each term except summer) includes full-time undergraduate students who have earned a 4.0 average for not less than 12 semester hours of credit in the semester just ended.

Spring term President’s List recipients follow the same rules as Dean’s List recipients.

Class Honors
To be eligible for undergraduate class honors:

• a freshman must have completed at least 12 semester hours at YSU
• a sophomore must have completed at least 24 semester hours at YSU

Honors are based on the accumulative point average at YSU only; no transfer work is included. Both full-time and part-time students are eligible, provided they:

1. have a minimum cumulative point average of 3.00;
2. have earned at least 12 credits in traditionally graded courses taken during the three semesters (including summer) preceding the term in which honors are awarded; and
3. are enrolled during the current term.

Non-matriculated, post-secondary enrollment option students, transient students, post-graduate transfer students, and YSU students who have received a baccalaureate degree prior to spring semester in the academic year in which the honors convocation is held are not eligible. A student can receive class honors only once as a member of a particular class (freshman, sophomore, etc.). The number of honor recipients approximates the top one percent of the total fall enrollment of every class in each undergraduate unit of the University, but it may slightly exceed this figure because of ties.

Honors Convocation
The Honors Convocation recognizes those students who have distinguished themselves academically. Some of the awards listed under Awards and Prizes (see Student Activities section) are announced and presented on this occasion.

Graduation Honors
Students graduating with a baccalaureate degree who rank high scholastically are awarded special honors at the commencement exercise, as follows:

• Those who attain a quality point average of 3.8 or higher are granted their degrees summa cum laude.
• Those who attain a quality point average of less than 3.8 but not less than 3.6 are granted their degrees magna cum laude.
• Those who attain a quality point average of less than 3.6 but not less than 3.4 are granted their degrees cum laude.

Students graduating with any associate degree who rank high scholastically are awarded special honors at the commencement exercise, as follows:

• Those who attain a quality point average of 3.7 or higher are granted their degrees With High Honors.
• Those who attain a quality point average of less than 3.7 but not less than 3.4 are granted their degrees With Honors.

A student who has processed an approved Statute of Limitations is ineligible for graduation honors. All YSU grades (including those deducted from accumulative totals as a result of an approved Repetition Form) will be counted in determining honors for graduation.

Transfer students who are baccalaureate degree candidates must have at least 60 semester hours of credit at Youngstown State University, or those who are associate degree candidates must have at least 40 semester hours of credit at Youngstown State University to be eligible for graduation honors. In addition, no transfer credit is included in the calculation of the point average.

Academic Misconduct
Academic Integrity
Academic integrity is essential to the educational process and serves to uphold the educational mission of the University. Therefore, all members of the University community have a responsibility for maintaining high standards of honesty and ethical practice with regards to their academic endeavors. Students should consult with their instructor if they are not sure what may
constitute a violation of the Academic Integrity policy. The full policy can be found in Article III. 1. of The Student Code of Conduct.

Although instructors are responsible for taking all reasonable precautions to limit the possibility of students violating the Academic Integrity policy, students share in this responsibility and should report any suspected violations to the instructor.

After the instructor has identified a possible violation of the policy, they must notify the student within 48 hours in writing, via university email, of the allegations and invite the student to participate in an academic integrity conference. The instructor and student may hold the conference without written notification. This academic integrity conference shall occur within five university working days of the written notification to the student.

If an instructor concludes that the student is responsible for a violation of the Academic Integrity policy, they may impose a sanction, including the following:

- official warning
- lower the grade on the exam, paper, or assignment in question
- lower the student’s final grade for the course in question
- request additional action from the Academic Grievance Committee via a hearing

A complete description of the Academic Integrity process is detailed in Article V. of The Student Code of Conduct. However, it should be noted that a student can:

- accept the charge and sanction(s) offered by the instructor, which is acknowledged by signing the Academic Integrity form
- accept the charge, but decline the sanction(s) offered by the instructor; this will then move the case before the Academic Grievance Committee for a hearing
- decline the charge and the sanction(s) offered by the instructor; this will then move the case before the Academic Grievance Committee for a hearing

Regardless of whether the student chooses to sign the Academic Integrity form, any case in which the student may face removal from their academic program or college, or University suspension or expulsion, requires a hearing before the Academic Grievance Committee to ensure due process for the student. A representative from the Office of Student Conduct must be present at all such hearings to serve in an advisory capacity.

In situations wherein the student already has a prior recorded violation of the Academic Integrity policy, an additional violation of the policy will require referral to the Office of Student Conduct for possible additional charges.

The Student Code of Conduct (https://cms.ysu.edu/administrative-offices/student-conduct/student-code-conduct/) is available online. A printed copy can be found in the annual Penguin Planner.

Student Academic Grievance Subcommittee. Per the YSU-OEA Agreement, Article 20, academic matters that may be grieved are the following:

- Material deviation from the grading scale or weight distribution indicated on the course syllabus by the faculty member, to the detriment of the individual student or the entire class.
- Material deviation of faculty contractual obligations as specified in the article on Teaching Rights and Responsibilities in the Faculty Collective Bargaining Agreement, to the detriment of the individual student or the entire class.

Other areas of contention between a student and a faculty member may not be grieved under this section. The student should contact the department chair of the faculty member’s department or the dean of the college housing the faculty member’s department for further advisement in these situations.

Students wishing to file a grievance should contact the administrative assistant in the Office of Academic Affairs for an appropriate referral. Click on A Brief Guide to Student Academic Grievances (https://ysu.edu/sites/default/files/Student_Academic_Grievance_Info_Sheet.pdf) for further information about this process.


A student checklist (https://www.ysu.edu/sites/default/files/2017%20Student%20Checklist%20for%20Hearing%20Prep.pdf) and hearing advisor guidelines (http://www.ysu.edu/sites/default/files/2017%20Student%20Hearing%20Advisor%20Guidelines.pdf) are also available.

Student Complaints

Youngstown State University is committed to the continuous improvement of the services it provides to its students. On occasion, a student may have a complaint regarding the fairness or quality of service they received. Students are encouraged to share their concerns pursuant to this policy so that the university may address issues in a timely and professional manner.

If students experience a problem on campus, they are encouraged, but not required, to try resolving it by speaking directly with the staff, faculty member, or administrator with whom they have had an issue. If the problem still exists, the following resources are provided to aid a student in coming to a resolution.

Academic-Related Complaints (Excluding Grade Appeals)

Academic-related complaints are student complaints related to services and responsibilities provided by departments within academic affairs, including but not limited to academic colleges, academic departments, student success, distance education, library, mathematics assistance center, reading and study skills, and writing center.

Students can submit a complaint here. (https://cm.maxient.com/reportingform.php?YoungstownStateUniv&layout_id=2)

YSU will keep student information confidential to the fullest extent of the law. Students who desire to make an anonymous complaint are encouraged to use YSU’s ethics reporting process (https://secure.ethicspoint.com/domain/media/en/gui/49559/), which is hosted by a third party and can maintain students’ anonymity.
Academic-Related Complaints with Grade Appeals

Student complaints concerning academic matters related to material deviation from the grading scale or weight distribution indicated on the course syllabus by the faculty member, to the detriment of the individual student or the entire class, or involving material deviation of faculty contractual obligations as specified in the article on Teaching Rights and Responsibilities in the Faculty Collective Bargaining Agreement, to the detriment of the individual student or the entire class, must follow procedures outlined here (https://catalog.ysu.edu/undergraduate/general-information/academic-policies-procedures/academic-grievances/).

Tuition Appeals

Any withdrawal or reduction in academic hours after the posted schedule will not be entitled to a reduction of charges and/or refund unless an Application for Involuntary Withdrawal is submitted and approved by the Fees and Charges Appeal Board. All decisions made by this board are final and binding.

If a student withdraws for reasons beyond his or her control (e.g., illness, military service, job transfer, or shift change imposed by the employer that creates a direct conflict with the class schedule), the fee charges may be reduced in proportion to the number of weeks enrolled, upon submission and approval of an application for involuntary withdrawal.

An application for involuntary withdrawal can be processed only for courses in which the student has already received a grade of "W" (withdrawn). Applications for involuntary withdrawal will be considered only for terms falling within the immediately preceding one-year time period (three semesters). Appeals pertaining to terms beyond this one-year time limit will not be accepted. All applications for involuntary withdrawal must be documented, and applications are processed only by mail on forms provided by Office of University Bursar. Address such correspondence to:

Fees and Charges Appeals Board
c/o University Bursar
Youngstown State University
One University Plaza
Youngstown, OH 44555

More information can be found here (https://catalog.ysu.edu/undergraduate/general-information/tuition-fees-charges/).

Discrimination, Harassment, or Retaliation

Faculty, staff, students, or others who experience discrimination, harassment or retaliation have several options for reporting such concerns. Inappropriate student behavior may be reported to either the Office of Student Conduct (any such behavior), or the Title IX office (including any behavior based on sex or gender, such as sexual harassment, sexual assault, stalking, etc.). Inappropriate behavior by faculty, staff, or others should be reported to the Office of Equal Opportunity and Policy Development, Title IX, or Human Resources. If the reporting party feels they are in danger, they should also contact YSU PD.

More information can be found here (https://catalog.ysu.edu/undergraduate/general-information/office-equal-opportunity-policy-compliance/).

Non-Academic Complaints

A non-academic complaint is a student complaint related to the services and responsibilities provided by the departments and divisions of budget and finance, enrollment management and planning, equal opportunity and diversity, facilities, human resources, multicultural affairs, and student experience.

Complaints or concerns not listed here can be filed through YSU’s reporting system (https://cm.maxient.com/reportingform.php?YoungstownStateUniv&layout_id=2). YSU will keep student information confidential to the fullest extent of the law. Students who would like to make an anonymous complaint are encouraged to use YSU’s ethics reporting process (https://secure.ethicspoint.com/domain/media/en/gui/49559/), which is hosted by a third party and can maintain student anonymity.

Other Complaints

Complaints or concerns not listed here can be filed through YSU’s reporting system (https://cm.maxient.com/reportingform.php?YoungstownStateUniv&layout_id=2). YSU will keep student information confidential to the fullest extent of the law. Students who would like to make an anonymous complaint are encouraged to use YSU’s ethics reporting process (https://secure.ethicspoint.com/domain/media/en/gui/49559/), which is hosted by a third party and can maintain student anonymity.

Complaints to External Agencies

Student Complaints to the Ohio Department of Higher Education

The Ohio Department of Higher Education (ODHE) is responsible for responding to formal complaints against public, independent non-profit and proprietary institutions of higher education in Ohio. Although the ODHE has limited authority over colleges and universities and cannot offer legal advice or initiate civil court cases, the Chancellor's staff will review submitted complaints and work with student complainants and institutions.

Complaints not under the Chancellor’s jurisdiction:

- Complaints filed more than two years after the incident
- Grade disputes
- Student conduct violations
- Criminal misconduct
- Violations of federal law

If a student is unable to resolve a complaint through YSU’s established complaint process, the student should contact the Ohio Department of Higher Education to use the online complaint form (https://www.ohiohighered.org/students/complaints/).

Student Complaints to the Pennsylvania Department of Education

For additional information, contact:

Pennsylvania Department of Education
Bureau of Postsecondary and Adult Education
333 Market Street, 12th Floor
Harrisburg, PA 17126-0333

If a student is unable to resolve a complaint through YSU’s established complaint process, the student should contact the Pennsylvania Department of Education to use the Higher Education Complaint Form (http://www.education.pa.gov/Documents/Postsecondary-Adult/College%20and%20Career%20Education/Colleges%20and%20Universities/Higher%20Education%20Complaint%20Form.pdf).
Student Resources:

Student Outreach Support (https://ysu.edu/student-experience/student-outreach-support/)

Director: Ms. Nicole Kent-Strollo
Kilcawley Center 2101
(office) 330.941.4721
(cell) 330.717.2613

Student Government (http://sga.ysu.edu/)

The YSU Student Government supports students and assists them with the proper procedures regarding the filing of and hearings for academic related complaints with grade appeals. For more information, click here (http://sga.ysu.edu/).

Student Records

Student Name Changes

Students who need to have their official name changed can complete the Student Change of Information form (http://cms.ysu.edu/administrative-offices/student-one-stop/frequently-requested-forms/). Legal documentation (marriage license, passport, divorce document, court order, naturalization papers) must accompany the form. This documentation may also be presented to the Office of the Registrar.

Notification of Rights under FERPA

The Family Educational Rights and Privacy Act (FERPA) affords students certain rights with respect to their education records. They are:

1. The right to inspect and review the student's education records within 45 days of the day the University receives a request for access.
A student should submit to the registrar, dean, head of the academic department, or other appropriate official, a written request that identifies the record(s) he/she wishes to inspect. The University official will make arrangements for access and notify the student of the time when and the place where the records may be inspected. If the records are not maintained by the University official to whom the request was submitted, such official shall advise the student of the correct official to whom the request should be addressed.

2. The right to request the amendment of the student's education records that the student believes are inaccurate, misleading, or otherwise in violation of the student's privacy rights.
A student should write the University official responsible for the record in question, clearly identifying the part of the record he/she wants to inspect, and specifying why it is inaccurate, misleading, or otherwise in violation of his/her privacy rights.
If the University decides not to amend the record as requested by the student, the University will notify the student of the decision in writing and advise the student of his/her right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.

3. The right to consent to disclosures of personally identifiable information contained in the student's education records, except to the extent that FERPA authorizes disclosure without consent.
Personally identifiable information is information that, if disclosed, would make a student's identity easily traceable, e.g., name, address or social security number. An exception which permits disclosure without consent is disclosure to University officials with legitimate educational interests.
A University official is a person employed by Youngstown State University in an administrative, supervisory, academic, research, or support staff position (including law enforcement unit personnel and health staff); a person or company with whom the University has contracted (such as an attorney, auditor, or collection agent); a person serving on the Board of Trustees; or a student or volunteer serving on an official committee, or assisting a University official in performing his/her tasks.
A University official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibility for Youngstown State University.

Also, the requirement for consent does not apply to the following:
• Requests by officials of another institution where the student seeks to enroll or is already enrolled for purposes related to enrollment or transfer.
• Requests in compliance with a lawful subpoena or judicial order.
• Requests in connection with a student’s application for or receipt of financial aid.
• Requests by state authorities and agencies specifically exempted from the prior consent requirements by the Act, conducting studies on behalf of the University, if such studies do not permit the personal identification of students to any persons other than to representatives of such organizations and if the personal identification data is destroyed when no longer needed.
• Information submitted to accrediting organizations.
• Requests by parents of a dependent student, when claimed by a parent on one’s Federal Income Tax Return.
• In the case of a health or safety emergency, the University may release information from education records to appropriate persons in connection with an emergency, if the knowledge of such information is necessary to protect the health or safety of a student or others.
• To authorized federal officials who have need to audit and evaluate federally-supported programs.
• The results of any disciplinary proceeding conducted by the University against an alleged perpetrator of a crime of violence or non-forcible sex offense to the alleged victim of that crime.
• Disclosure to a parent of an underage student in violation of University policy governing the use or possession of alcohol or drugs.

4. The right to prevent the University from disclosing any or all of the information about the student the University has designated as directory information.
FERPA permits the disclosure of directory information without the consent of the student. Directory information is information contained in a student education record which would not generally be considered harmful or an invasion of privacy if disclosed. Youngstown State University has designated the following types of information as directory information:
• name;
• address (local, home, and email);
• telephone listing (campus and home);
• enrollment status (e.g., full-time, part-time, withdrawn);
• field of study (including college of enrollment, major and campus);
• participation in officially recognized activities and sports;
• weight and height of members of athletic teams;
• dates of attendance and graduation;
• degrees, honors, and awards received;
• previous educational institutions or agencies attended; and
• photographic, video or electronic images of student.
Any student wishing to exercise this right must inform the Registrar in writing of the information not to be designated as directory information with respect to that student. If no such written notification is submitted, the University will assume that a student does not object to the release of the directory information. A student's request for such non-disclosure will remain in effect until the student notifies, in writing, the Registrar otherwise.

5. The right to file a complaint with the U.S. Department of Education concerning alleged failures by Youngstown State University to comply with the requirements of FERPA.
Graduation Requirements

Catalog of Entry
The Undergraduate Catalog in effect when a student first enrolls at the university or any one subsequent catalog will be the guide to graduation requirements, provided the student is in continuous attendance and does not change majors.

When a student changes majors, the guide to graduation requirements will be the catalog in effect at the time of change or any one subsequent catalog. Exceptions to this rule include the requirements for the minor and general education requirements. Unless the minor is specified by the new major, a student who has been in continuous enrollment and changes majors can fulfill the requirements for a minor by using the criteria in effect in either the catalog of entry or the catalog in effect at the time of the change in major. See the section on General Education Requirements for the relevant policy on general education.

Readmitted students will use the catalog in effect at their last readmission or any one subsequent catalog as the guide to graduation requirements. Any exceptions to requirements must be approved by the student’s department chair and/or college dean. The University reserves the right to change course offerings and academic requirements.

Candidacy for a Degree
To be eligible for candidacy for any degree, students must fulfill the following three requirements:

Application
You must file a Request for Graduation Evaluation form with the dean of your college after the completion of 40 semester hours for the associate and 100 semester hours for the baccalaureate degree.

An Application for Graduation form must be filed by the deadline indicated in the University Academic Calendar. The application is available on the student's YSU Penguin Portal.

If the student does not graduate for the term which the application has been filed, the student must reapply. The student must fulfill the University-wide, college, and departmental requirements as well as the minimum credit hours.

Residency
The last 20 semester hours leading to an associate degree and the last 30 semester hours leading to a baccalaureate degree must be completed at Youngstown State University. (In the pre-forestry, pre-law, and pre-medical curricula, however, which allow the student to earn final credit hours in absentia, the last 30 semester hours prior to the period of absence must be spent at Youngstown State University.) A minimum of 16 semester hours in the concentration area for the associate degree, and a minimum of 16 hours of credits in the major in the baccalaureate degree, must be earned in residence. A minimum of 21 semester hours of upper-division credit for the baccalaureate degree must be earned in residence. Exceptions must be approved by the Office of the Provost. Additional requirements may be specified by individual colleges.

Grades
The cumulative point average must be at least 2.00 (see The Point Average and Scholastic Standing) at the time candidacy is approved and at the time the degree is granted.

Additional requirements for the associate or baccalaureate degree appear below.

Baccalaureate Degree
A minimum of 120 semester hours must be successfully completed to earn a bachelor's degree. In addition to requirements stated under Candidacy for a Degree, the following requirements must also be fulfilled for a baccalaureate degree:

Course Levels
At least 60 semester hours must be completed in courses numbered 2600 or higher; at least 39 of these 60 hours must be in courses numbered 3700 or higher. (Updated 12/5/2019)

Majors
Each student must complete a major. A department major consists of at least 30 semester hours of an approved set of courses. A combined major, in which courses are given by more than one department, consists of at least 42 semester hours. At least two disciplines must be represented in a combined major with the core discipline having the majority and at least 12 s.h. coming from outside of the core (these 12 s.h. may be spread over multiple disciplines, but at least 6 s.h. must be at the 3700-level or above). All grades in the major must be "C" or better.

Each department determines the course requirements for its own major or majors. Responsibility for certifying that a student has completed a major rests with the chairperson of the major department. The student may be required to do more than the minimum stated in the preceding paragraph.

As soon as a student has decided on a major, he or she should consult with the department chair of the major department. A major must be declared by the time a student has achieved junior standing. Early consultation with the department chair is strongly recommended, since in some departments the student must begin coursework related to the major during the freshman year or risk a delay in graduation. (Updated per 3/4/2020 Academic Senate resolution.)

Minors
A minor is an intellectual venture that broadens and deepens the student’s intellectual growth. An intellectual framework and coherence are evident in the scope and sequence of the minor course of study. A minor is intended to contrast with or deepen the major or General Education and is to be taken in a discipline other than that of the major. In approved interdisciplinary minors, courses from the student's major discipline can be counted in the minor provided that the same courses are not counted toward the major. Each student must complete a minor, unless the student has a combined major or is enrolled in a professional or technical curriculum that does not require a delineated minor. Check with an academic advisor for specific information.

A minor consists of at least 12 hours (but not more than 19 hours) of an approved, published set of courses as listed in the Undergraduate Catalog. All grades in the minor must be "C" or better. Courses taken under the Credit/No Credit option may not be counted toward the minor. Upper-division courses must comprise at least 6 s.h. in the minor. An individualized minor may be developed and approved through the Individualized Curriculum Process (ICP). Transfer students may also use the ICP process for approval of a minor course of study. An official minor is designated on the student's transcript at the time the degree is awarded. In instances when extenuating circumstances are present, students who have taken courses that meet the guidelines of a minor (a minimum of 12 s.h. in a discipline with at least 6 s.h. at 3700-level or above) but do not have the designated courses of the official minor may declare an unofficial minor to meet graduation requirements. Only courses that are part of the major curriculum (from the discipline being used for the unofficial minor)
can count toward an unofficial minor. This minor must be agreed to by the chairperson of the major department.

Each department develops the specific pattern or sequence of courses for any minor(s) it offers. However, the department in which the student receives the major is responsible for certifying that a student has completed a minor. Certification will be guided by the description of minors published in the Undergraduate Catalog. Courses taken for the minor may not be counted toward the student’s major, and courses taken for a major may not be counted toward a student’s minor. Students should declare a minor prior to their junior year. For a list of minors and their requirements see Minors List.

Certificates
A certificate identifies a concentration of study in an academic area. There are a limited number of academic areas where certificates are available, and students should consult the program descriptions for this information. All grades for the certificate must be “C” or better.

Associate Degree
A minimum of 60 semester hours must be successfully completed in order to earn an associate degree. Students in associate degree programs must take a minimum of six general education courses, including Writing I and Writing II, and four additional courses selected from at least three of the following areas: mathematics, speech, natural science, arts and humanities, social science, or social and personal awareness. No more than one course counted toward the requirement may be in mathematics. Students should check with their departments to see if certain general education courses are mandated by their program.

Commencement
Graduation ceremonies occur twice a year. Fall commencement is held in December, and spring commencement is held in May. Students who graduate in summer are invited to participate in either spring or fall commencement activities.

First-Year Requirement
Success Seminar
All first-time degree seeking undergraduates and transfer students with fewer than 30 transfer credits are required to take a Success Seminar in their first semester at YSU. Success Seminars are designed to provide students with a strong foundation for academic success at YSU.

First-year students admitted to the Strong Start program will take SS 1500: Strong Start Success Seminar. Students learn the “ins and outs” of the academic community, strengthen their study and time management skills, learn habits of mind that promote success, identify and balance competing priorities, and use appropriate campus resources to overcome challenges that arise.

First-year students admitted to the Honors College will take HNRS 1500: Introduction to Honors. This course prepares students for the expectations and requirements of the Honors Program. Students develop skills that aid in their overall academic endeavors and explore topics pertinent to their development within the Honors Program and as citizens of the university, local, national and global communities.

All other first-year students admitted to YSU will take YSU 1500: Success Seminar. This course helps students learn the conventions that govern the academic community including what is expected of them and what they are responsible for, skills needed to successfully manage their academic workload, study strategies, and habits of mind that promote success in college.

General Education Requirements
Catalog of Entry
The Undergraduate Academic Catalog in effect when a student first enrolls at the university or any one subsequent catalog will be the guide to General Education Requirements.

Grades
Unless otherwise stated in a course description, a student must earn a grade of D or better to receive general education credit for a course. In some cases, programs will require a grade of C or better for general education courses such as when a general education course is also part of the major. In addition, certain general education courses serve as prerequisites for higher-level courses. Those higher-level courses may require a grade of C or better in the prerequisite course general education course. In both cases, a course completed with a D will still count toward a student’s general education requirements, but the student will need to retake the course and earn a C or better to meet the program or prerequisite requirements. Students should check with their advisor and the course catalog to determine the requirements.

Goals
The general education program at YSU is designed to help students achieve the following five goals:

- Students will demonstrate the ability to write and speak effectively, reason quantitatively, and think critically so they are prepared to perform appropriately in their professions upon graduation. These skills will be applied in the major and culminate in the successful completion of a senior capstone project.
- Students will demonstrate understanding of the basic facts, principles, theories, and methods of science. Students will demonstrate the interdependence of science and technology and the influence of science and technology on society.
- Students will interpret significant writings and works of art, with a focus on aesthetics, historical responses, and the nature of the human condition.
- Students will demonstrate understanding of the development, diversity, and complexity of human behavior, institutions, and culture.
- Students will demonstrate understanding in any of the following critical areas of contemporary life: Domestic Diversity, International Perspectives, Sustainability, and Well-being.

Learning Outcomes
To assist students in achieving the goals above, the courses included in the General Education model incorporate some combination of the learning outcomes. The outcomes as they relate to the goals for the various types of General Education courses are listed below.

Core Competencies Learning Outcomes:
GOAL: Students will demonstrate the ability to write and speak effectively, reason quantitatively, and think critically so they are prepared to perform appropriately in their professions upon graduation.

- Students will demonstrate the ability to write and speak effectively, develop sound arguments, and derive justified conclusions.
- Students will demonstrate the ability to reason using quantitative data, and students will demonstrate use of mathematical methods and concepts in both abstract and concrete contexts.
- Students will demonstrate the ability to reason critically and identify credible sources.
Knowledge Domain Learning Outcomes:

Natural Sciences
GOAL: Students will demonstrate understanding of the basic facts, principles, theories, and methods of science. Students will demonstrate the interdependence of science and technology and the influence of science and technology on society.
- Students will successfully perform an experiment to test a hypothesis including the collection and analysis of data.
- Students will demonstrate the knowledge and application of scientific principles.
- Students will use and interpret formulas, graphs, and tables.
- Students will demonstrate understanding of the interactions of science, technology and society.

Arts and Humanities
GOAL: Students will interpret significant writings and works of art, with a focus on aesthetics, historical responses, and the nature of the human condition.
- Students will analyze and evaluate the elements and the personal and societal impact of multiple types of literary and artistic expressions.
- Students will demonstrate awareness of ethical or cultural values in shaping the human experience.

Social Sciences
GOAL: Students will demonstrate understanding of the development, diversity, and complexity of human behavior, institutions, and culture.
- Students will demonstrate understanding of the contexts and development of human cultures and institutions.
- Students will demonstrate understanding of individual and social behavior.
- Students will demonstrate an understanding of methodologies used in the social sciences.

Social and Personal Awareness
GOAL: Students will demonstrate understanding in any of the following critical areas of contemporary life: Domestic Diversity, International Perspectives, Sustainability, and Well-being.
- Domestic Diversity - Students will demonstrate knowledge of the experiences of different groups within the United States where those groups are defined by class, ethnicity, race, religion, disability, sex, or sexual orientation.
- International Perspectives - Students will demonstrate knowledge of the artistic, social, economic, or political life of communities outside the United States.
- Environmental Sustainability - Students will demonstrate understanding of contemporary concerns regarding the environmental sustainability of social, economic, public policy and technological systems and practices.
- Wellbeing - Students will demonstrate understanding of and appreciation for the relationship between personal behaviors and lifelong health and wellness.

Capstone Learning Outcomes:
GOAL: Students will demonstrate the ability to write and speak effectively, reason quantitatively, and think critically so they are prepared to perform appropriately in their professions upon graduation. These skills will be applied in the major and culminate in the successful completion of a senior capstone project.
- Write and speak effectively.
- Acquire, process and present quantitative and qualitative information using the most appropriate technologies.
- Reason critically, to distinguish among forms of argumentation, and to derive justified conclusions.

Baccalaureate Degree General Education Requirements

A. Core Competencies (p. 56)

Writing
To learn the skills of effective writing, students will:
- Take two courses:
  - ENGL 1550 Writing 1 or ENGL 1549 Writing 1 with Support - the standard introductory writing course
  - ENGL 1551 Writing 2 - a course in which students investigate a thematic topic (students with ACT scores at or above 28 will only need to take ENGL 1551 Writing 2)
- Gather evidence from the library, Internet, or other appropriate sources
- Write a research paper using a computer

Speaking
To become effective speakers, students will take CMST 1545 Communication Foundations.

Critical Thinking
The critical-thinking learning outcome will be met through each student’s major’s curriculum.

Mathematics
Students must take at least one approved course that teaches mathematical and statistical skills. A student may satisfy this requirement by passing an approved course or by passing a higher-level mathematics course.

B. Knowledge Domains: Arts and Humanities (p. 53), Natural Sciences (p. 54), Social Sciences (p. 54), and Social and Personal Awareness (p. 55)

To become more well-rounded members of the community, students are required to take a total of nine courses from the four knowledge domains. The coursework gives students exposure to fields of study outside their majors.
Students are required to take:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
</tr>
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<tbody>
<tr>
<td>ENGL 1550 Writing 1 or ENGL 1549 Writing 1 with Support</td>
<td>Natural Science (at least one of the courses must include a laboratory component)</td>
</tr>
<tr>
<td>ENGL 1551 Writing 2</td>
<td>Social Science</td>
</tr>
<tr>
<td>CMST 1545 Communication Foundations</td>
<td>Social and Personal Awareness</td>
</tr>
</tbody>
</table>

C. Capstone (p. 56)

All majors require a capstone course. In the capstone course, students are required to demonstrate knowledge in their major as well as their ability to communicate in writing, their oral communication skills, and their ability to reason critically.

Baccalaureate Degree General Education Requirements Summary

<table>
<thead>
<tr>
<th>Core Competencies</th>
<th>Writing</th>
<th>Speech</th>
<th>Mathematics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2 courses</td>
<td>1 course</td>
<td>1 course</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Knowledge Domains</th>
<th>Arts and Humanities</th>
<th>Natural Science</th>
<th>Social Science</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2 courses</td>
<td>2 courses (1 must include a lab)</td>
<td>2 courses</td>
</tr>
</tbody>
</table>
Bachelor's degree seeking students must complete two of the following:

- Arts and Humanities
- Additional information.

requirements. See the coursework they need to complete the YSU general education requirements. Students should consult with an academic advisor to discuss the coursework they need to complete the YSU general education requirements. Students will need to take general education courses required for their major. See the website for an up-to-date list.

Students with a bachelor's degree from a regionally accredited institution in Ohio, students should only take Ohio Transfer Module (OTM) Approved Courses.

Students in Applied Associate Degrees must take a minimum of five general-education courses, including Writing I and Writing II, one course in mathematics, two courses representing two of the following domains: natural science, arts and humanities, and social science. To ensure transferability of an Associates Degree within the State of Ohio, students should take only Ohio Transfer Module (OTM) Approved Courses in arts and humanities and social science.

Academic Associates Degrees at YSU

Students in the Associates of Arts Program must fulfill the same Gen. Ed. requirements as required for Baccalaureate Programs (with exception of the capstone.) To ensure transferability of an Associates Degree within the State of Ohio, students should only take Ohio Transfer Module (OTM) Approved Courses.

General Education and Transfer Students

Transfer students with a bachelor's degree

Students with a bachelor's degree from a regionally accredited institution in the United States seeking an additional baccalaureate degree do not have to complete the YSU general education requirements. Students need to take general education courses required for their major. See the Degree Audit (http://cms.ysu.edu/administrative-offices/degree-audit/degree-audit/) website for an up-to-date list.

Transfer students without a bachelor's degree

All transfer students without a bachelor's degree from a regionally accredited institution in the United States must complete the general education requirements. Students should consult with an academic advisor to discuss the coursework they need to complete the YSU general education requirements. See the Transfer Credit (p. 17) section of this catalog for additional information.

Arts and Humanities

Bachelor's degree seeking students must complete two of the following:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 1544</td>
<td>Survey of Art History: Body, Gender, and Self</td>
<td>3</td>
</tr>
<tr>
<td>ART 2648</td>
<td>Experience Art: Social and Behavioral Perspectives</td>
<td>3</td>
</tr>
<tr>
<td>D ance</td>
<td>Survey of Dance</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 1590</td>
<td>Introduction to Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 2610</td>
<td>World Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 2615</td>
<td>Science Fiction and Fantasy Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 2617</td>
<td>Women in Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 2618</td>
<td>American Literature and Diversity</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 2620</td>
<td>African Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 2630</td>
<td>LGBTQIA Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 2631</td>
<td>Mythology in Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 2665</td>
<td>Introduction to Film Study</td>
<td>3</td>
</tr>
<tr>
<td>F NFL 2610</td>
<td>Foreign Film</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 2603</td>
<td>Journalism Ethics and Social Responsibilities</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 2603</td>
<td>Journalism as Literature</td>
<td>3</td>
</tr>
<tr>
<td>MUHL 2616</td>
<td>Survey of Jazz</td>
<td>3</td>
</tr>
<tr>
<td>MUHL 2617</td>
<td>Film Music</td>
<td>3</td>
</tr>
<tr>
<td>MUHL 2618</td>
<td>Rock 'n' Roll to Rock</td>
<td>3</td>
</tr>
<tr>
<td>MUHL 2619</td>
<td>Music of Non-Western Societies</td>
<td>3</td>
</tr>
<tr>
<td>MUHL 2621</td>
<td>Music Literature and Appreciation</td>
<td>3</td>
</tr>
<tr>
<td>MUHL 2622</td>
<td>Popular Music in America</td>
<td>3</td>
</tr>
<tr>
<td>MUHL 2624</td>
<td>Survey of Hip Hop</td>
<td>3</td>
</tr>
<tr>
<td>MUHL 3772</td>
<td>Music History and Literature</td>
<td>3</td>
</tr>
<tr>
<td>MUHL 3773</td>
<td>Music History and Literature</td>
<td>3</td>
</tr>
<tr>
<td>MUHL 3774</td>
<td>Music History and Literature</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 1560</td>
<td>Introduction to Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 1561</td>
<td>Technology and Human Values</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 1565</td>
<td>Critical Thinking</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 2608</td>
<td>The Examined Life</td>
<td>3</td>
</tr>
<tr>
<td>PHIL/REL 2610</td>
<td>Global Ethics</td>
<td>3</td>
</tr>
</tbody>
</table>

Only one of the following:

| PHIL 2625 | Introduction to Professional Ethics | 3    |
| PHIL 2626 | Engineering Ethics | 3    |
| PHIL 2627 | Law and Criminal Justice Ethics | 3    |
| PHIL 2628 | Business Ethics | 3    |
| PHIL 2635 | Ethics of War and Peace | 3    |
| PHIL 3711 | General Ethics | 3    |
| REL 2601 | Introduction to World Religions | 3    |
| REL 2605 | Myth, Symbol, and Ritual | 3    |
| REL/PHIL 2610 | Global Ethics | 3    |
| REL 2617 | Introduction to Asian Religions | 3    |
| REL 2621 | Religion and Moral Issues | 3    |
| REL 2631 | Religion and the Earth | 3    |
| THTR 1512 | The American Musical | 3    |
| THTR 1560 | Introduction to Theatre | 3    |
| THTR 1590 | History of Motion Pictures | 3    |
| THTR 2690 | The Art of Motion Pictures | 3    |

1 Courses are part of the Ohio Transfer Module and are guaranteed to transfer to any of Ohio’s public institutions of higher education as a subject area general education credit. Ohio’s Department of Higher Education maintains an up-to-date list of OTM approved courses through the OTM reporting system. (https://reports-cems.transfercredit.ohio.gov/)

2 Courses are cross-listed with another General Education domain.
Social Sciences
Bachelor's degree seeking students must complete two of the following:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFST 2600</td>
<td>Introduction to Africana Studies 1 2</td>
<td>3</td>
</tr>
<tr>
<td>AMER 2601</td>
<td>American Identity 2</td>
<td>3</td>
</tr>
<tr>
<td>AMER 2605</td>
<td>Turning Points in United States History 1 1</td>
<td>3</td>
</tr>
<tr>
<td>AMER 2606</td>
<td>Turning Points in United States History 2 1,2</td>
<td>3</td>
</tr>
<tr>
<td>AMER 2610</td>
<td>Work and Class in American Culture</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 1500</td>
<td>Introduction to Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 1503</td>
<td>The Rise and Fall of Civilizations</td>
<td>3</td>
</tr>
<tr>
<td>CJFS 1500</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>CMST 2600</td>
<td>Communication Theory</td>
<td>3</td>
</tr>
<tr>
<td>Only one of the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECON 1501</td>
<td>Economics in Action 1</td>
<td></td>
</tr>
<tr>
<td>ECON 2610</td>
<td>Principles 1: Microeconomics</td>
<td></td>
</tr>
<tr>
<td>ECON 1502</td>
<td>Panic and Prosperity, United States Economic Policy Since the Great Depression</td>
<td>3</td>
</tr>
<tr>
<td>ECON 1503</td>
<td>Rich and Poor: Diversity and Disparity in the United States Workplace 1,2</td>
<td></td>
</tr>
<tr>
<td>ECON 2630</td>
<td>Principles 2: Macroeconomics</td>
<td></td>
</tr>
<tr>
<td>ENGL 2651</td>
<td>Introduction to Language 2</td>
<td></td>
</tr>
<tr>
<td>FNGL 2660</td>
<td>Women in the Ancient World</td>
<td></td>
</tr>
<tr>
<td>GEOG 2626</td>
<td>World Geography 1,2</td>
<td></td>
</tr>
<tr>
<td>GEOG 2640</td>
<td>Human Geography 1,2</td>
<td></td>
</tr>
<tr>
<td>GEOG 2650</td>
<td>Global Economic Landscapes 1,2</td>
<td></td>
</tr>
<tr>
<td>GERO 1501</td>
<td>Introduction to Gerontology</td>
<td></td>
</tr>
<tr>
<td>GERO 3703</td>
<td>Aging and Society 2</td>
<td></td>
</tr>
<tr>
<td>HIST 1500</td>
<td>Discovering World History 1,2</td>
<td></td>
</tr>
<tr>
<td>HIST 1501</td>
<td>American Dreams: Introduction to United States History 1</td>
<td></td>
</tr>
<tr>
<td>HIST 1511</td>
<td>World Civilization to 1500 1</td>
<td></td>
</tr>
<tr>
<td>HIST 1512</td>
<td>World Civilization from 1500 1,2</td>
<td></td>
</tr>
<tr>
<td>HIST 2605</td>
<td>Turning Points in United States History 1 1</td>
<td></td>
</tr>
<tr>
<td>HIST 2606</td>
<td>Turning Points in United States History 2 1,2</td>
<td></td>
</tr>
<tr>
<td>PHLT 1531</td>
<td>Fundamentals of Public Health 2</td>
<td></td>
</tr>
<tr>
<td>POL 1550</td>
<td>Introduction to Political Science 1,2</td>
<td></td>
</tr>
<tr>
<td>POL 1560</td>
<td>American Government</td>
<td></td>
</tr>
<tr>
<td>POL 2640</td>
<td>Contemporary World Governments 1,2</td>
<td></td>
</tr>
<tr>
<td>POL 2660</td>
<td>International Relations 2</td>
<td></td>
</tr>
<tr>
<td>PSYC 1560</td>
<td>General Psychology</td>
<td></td>
</tr>
<tr>
<td>PSYC 3700</td>
<td>Social Psychology</td>
<td></td>
</tr>
<tr>
<td>PSYC 3755</td>
<td>Child Development</td>
<td></td>
</tr>
<tr>
<td>PSYC 3758</td>
<td>Lifespan Development 2</td>
<td></td>
</tr>
<tr>
<td>SOC 1500</td>
<td>Introduction to Sociology</td>
<td></td>
</tr>
<tr>
<td>SOC 2601</td>
<td>Social Problems 1</td>
<td></td>
</tr>
<tr>
<td>SOC 3703</td>
<td>Aging and Society 2</td>
<td></td>
</tr>
<tr>
<td>TCOM 1595</td>
<td>Media Literacy and Culture</td>
<td></td>
</tr>
<tr>
<td>WMST 2601</td>
<td>Introduction to Women's Studies 1,2</td>
<td></td>
</tr>
</tbody>
</table>

1 Courses are part of the Ohio Transfer Module and are guaranteed to transfer to any of Ohio’s public institutions of higher education as a subject area general education credit. Ohio’s Department of Higher Education maintains an up-to-date list of OTM approved courses through the OTM reporting system (https://reports-cems.transfercredit.ohio.gov/pg_0?1719503559833_NO2.6.1)

2 Courses are cross-listed with another General Education domain.

Natural Sciences
Bachelor's degree seeking students must complete two of the following (one must include a lab):

### Natural Science Courses without a lab

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTR 1504</td>
<td>Descriptive Astronomy 1</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 1505</td>
<td>Biology and the Modern World 1</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 1551</td>
<td>Anatomy and Physiology 1 1,4</td>
<td></td>
</tr>
<tr>
<td>CHEM 1500</td>
<td>Chemistry in Modern Living</td>
<td></td>
</tr>
<tr>
<td>CHEM 1520</td>
<td>Allied Health Chemistry for Online Programs</td>
<td></td>
</tr>
<tr>
<td>ENST 1500</td>
<td>Introduction to Environmental Science 1,2</td>
<td></td>
</tr>
<tr>
<td>GERO 1503</td>
<td>Physical Geography 1</td>
<td>3</td>
</tr>
<tr>
<td>GERO 2630</td>
<td>Weather 1</td>
<td></td>
</tr>
<tr>
<td>GEOL 1504</td>
<td>The Dynamic Earth</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 2602</td>
<td>Introduction to Oceanography 1</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 1500</td>
<td>Conceptual Physics 1</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 1501</td>
<td>Fundamentals of Physics 1,4</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 1502</td>
<td>Fundamentals of Physics 2,4</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 2601</td>
<td>General Physics for Applied Medical Studies 1,4</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 2602</td>
<td>General Physics for Applied Medical Studies 2,4</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 2607</td>
<td>Physical Science for Middle and Secondary Education 4</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 2608</td>
<td>Sound</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 2610</td>
<td>General Physics 1,4</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 2611</td>
<td>General Physics 2,4</td>
<td>4</td>
</tr>
</tbody>
</table>

### Natural Science Courses with a lab

Labs must be taken with the associated course in order to count for Natural Science Lab credit.

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTR 1504 &amp; 1504L</td>
<td>Descriptive Astronomy 1 and Astronomy Laboratory 1</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 1505 &amp; 1505L</td>
<td>Biology and the Modern World and Biology and the Modern World Laboratory 3</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 1545 &amp; 1545L</td>
<td>Allied Health Anatomy and Physiology and Allied Health Anatomy and Physiology Laboratory 3,4</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 1551 &amp; 1551L</td>
<td>Anatomy and Physiology 1 and Anatomy and Physiology Laboratory 1,4</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 1552 &amp; 1552L</td>
<td>Anatomy and Physiology 2 and Anatomy and Physiology 2 Laboratory 3,4</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 2601 &amp; 2601L</td>
<td>General Biology: Molecules and Cells and General Biology: Molecules and Cells Laboratory 3,4</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 2602 &amp; 2602L</td>
<td>General Biology: Organisms and Ecology and General Biology: Organisms and Ecology Laboratory 3,4</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 2602H &amp; BIOL 2602L</td>
<td>Honors General Biology Organisms and Ecology and General Biology: Organisms and Ecology Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 1500 &amp; 1500L</td>
<td>Chemistry in Modern Living and Chemistry in Modern Living Laboratory 3</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 1510 &amp; 1510L</td>
<td>Chemistry for the Allied Health Sciences and Chemistry for the Allied Health Sciences Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 1515 &amp; 1515L</td>
<td>General Chemistry 1 and General Chemistry 1 Laboratory 3,4</td>
<td>4</td>
</tr>
</tbody>
</table>
Bachelor's degree seeking students must complete two of the following:

### Domestic Diversity

**COURSE** | **TITLE** | **S.H.**
---|---|---
AFST 2600 | Introduction to Africana Studies 1, 2 | 3
AFST 2601 | Introduction to Africana Studies 1, 2 | 3
AMER 2601 | American Identity 2 | 3
AMER/HIST 2606 | Turning Points in United States History 2, 1, 2 | 3
ART 1544 | Survey of Art History: Body, Gender, and Self | 3
ART 1591 | Idea Development and Creativity in Cultural Context | 3
CMST 2610 | Intercultural Communication | 3
ECON 1503 | Rich and Poor: Diversity and Disparity in the United States Workplace 1, 2 | 3
ENGL 2617 | Women in Literature 1, 2 | 3
ENGL 2618 | American Literature and Diversity 1, 2 | 3
ENGL 2630 | LGBTQIA Literature | 3
ENGL 2651 | Introduction to Language 2 | 3
HIST/AMER 2606 | Turning Points in United States History 2, 1, 2 | 3
SOC 2690 | Identities and Differences | 3

WMST 2601 | Introduction to Women's Studies 1, 2 | 3
WMST/TCED 2650 | LGBTQ Issues in History and Popular Culture | 3

### Environmental Sustainability

**COURSE** | **TITLE** | **S.H.**
---|---|---
ART/STEM 1530 | Sustainable Design in Practice | 3
ENST 1500 | Introduction to Environmental Science 2 | 3
GEOL 1500 | Environmental Geology 2 | 4
PHLT 1513 | Introduction to Environmental Health and Safety | 3
PHIL 2631 | Environmental Ethics | 3
REL 2631 | Religion and the Earth 1, 2 | 3
STEM/ART 1530 | Sustainable Design in Practice | 3

### International Perspectives

**COURSE** | **TITLE** | **S.H.**
---|---|---
ART 1540 | Masterpieces of World Art 1, 2 | 3
ART 1542 | Survey of Art History 2, 1, 2 | 3
ENGL 2610 | World Literature 1, 2 | 3
FNGL 2610 | Foreign Film 3 | 3
GEOL 2626 | World Geography 1, 2 | 3
GEOL 2640 | Human Geography 1, 2 | 3
GEOL 2650 | Global Economic Landscapes 1, 2 | 3
HIST 1500 | Discovering World History 1, 2 | 3
HIST 1512 | World Civilization from 1500 1, 2 | 3
MUHL 2619 | Music of Non-Western Societies | 3
MUHL 2621 | Music Literature and Appreciation 1, 2 | 3
MUHL 3771 | Music History and Literature 1 | 3
POL 1550 | Introduction to Political Science 1, 2 | 3
POL 2640 | Contemporary World Governments 1, 2 | 3
REL 2601 | Introduction to World Religions 1, 2 | 3
REL 2617 | Introduction to Asian Religions 1, 2 | 3

### Well-Being

**COURSE** | **TITLE** | **S.H.**
---|---|---
COUN 1587 | Introduction to Health and Wellness in Contemporary Society | 3
ECON 1505 | Introduction to Personal Financial Literacy | 3
FNUT 1515 | Normal Nutrition | 3
GERO/SOC 3703 | Aging and Society 2 | 3
GERO/SOC 3745 | Sociology of Health, Illness, and Healthcare 2 | 3
KSS 1500 | Physical Activity Core Concepts (Must be taken with two activity classes) | 3
PHLT 1531 | Fundamentals of Public Health 2 | 3
PHLT 1568 | Healthy Lifestyles | 3
PSYC 2692 | Human Sexuality | 3
PSYC 3707 | Psychology of Intimate Relationships | 3
PSYC 3758 | Lifespan Development 4 | 3
SOC/GERO 3703 | Aging and Society 2 | 3
SOC/GERO 3745 | Sociology of Health, Illness, and Healthcare 3

---

1. Courses are part of the Ohio Transfer Module and are guaranteed to transfer to any of Ohio's public institutions of higher education as a subject area general education credit. Ohio's Department of Higher Education maintains an up-to-date list of OTM approved courses through the OTM reporting system. (https://reports.cems.transfercredit.ohio.gov/pg_6/?1719503359833:NO:6;)

2. Courses are cross-listed with another General Education domain.

3. Lecture component of the course is OTM approved, however, the lab component is not OTM approved.

4. Courses are designed for science, engineering, and health science majors. Students should consult their advisor before selecting them.

### Social and Personal Awareness

Bachelor's degree seeking students must complete two of the following:

---

1. Courses are part of the Ohio Transfer Module and are guaranteed to transfer to any of Ohio's public institutions of higher education as a subject area general education credit. Ohio's Department of Higher Education maintains an up-to-date list of OTM approved courses through the OTM reporting system. (https://reports.cems.transfercredit.ohio.gov/pg_6/?1719503359833:NO:6;)

2. Courses are cross-listed with another General Education domain.

---

Courses are part of the Ohio Transfer Module and are guaranteed to transfer to any of Ohio's public institutions of higher education as a subject area general education credit. Ohio's Department of Higher Education maintains an up-to-date list of OTM approved courses through the OTM reporting system. (https://reports.cems.transfercredit.ohio.gov/pg_6/?1719503359833:NO:6;)

Courses are cross-listed with another General Education domain.
Core Competencies

Writing
Bachelor’s degree seeking students must complete the following two courses:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 1549</td>
<td>Writing 1 with Support</td>
<td>4</td>
</tr>
<tr>
<td>ENGL 1550</td>
<td>Writing 1 1</td>
<td>3</td>
</tr>
<tr>
<td>or ENGL 1550H</td>
<td>Honors Writing 1</td>
<td></td>
</tr>
<tr>
<td>ENGL 1551</td>
<td>Writing 2 (Students with ACT scores at or above 28 will only need to take ENGL 1551) 1</td>
<td>3</td>
</tr>
<tr>
<td>or ENGL 1551H</td>
<td>Honors Writing 2</td>
<td></td>
</tr>
</tbody>
</table>

Speaking
Bachelor’s degree seeking students must complete the following course:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMST 1545</td>
<td>Communication Foundations 1</td>
<td>3</td>
</tr>
</tbody>
</table>

Mathematics
Bachelor’s degree seeking students must complete one of the following courses:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1510</td>
<td>College Algebra 1</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1511</td>
<td>Trigonometry</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1513</td>
<td>Algebra and Transcendental Function 1</td>
<td>5</td>
</tr>
<tr>
<td>MATH 1552</td>
<td>Applied Mathematics for Management 1</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1570</td>
<td>Applied Calculus 1 1</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1571</td>
<td>Calculus 1 1</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1572</td>
<td>Calculus 2 1</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1581H</td>
<td>Honors Biomathematics 2</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1585H</td>
<td>Honors Accelerated Calculus 1</td>
<td>5</td>
</tr>
<tr>
<td>MATH 2623</td>
<td>Quantitative Reasoning</td>
<td>3</td>
</tr>
<tr>
<td>MATH 2662</td>
<td>Mathematics for Elementary Teachers 2</td>
<td>4</td>
</tr>
<tr>
<td>MATH 2665</td>
<td>Foundations of Middle School Mathematics 2</td>
<td>4</td>
</tr>
<tr>
<td>MATH 2670</td>
<td>Applied Calculus 2</td>
<td>5</td>
</tr>
<tr>
<td>MATH 2686H</td>
<td>Honors Accelerated Calculus 2</td>
<td>5</td>
</tr>
<tr>
<td>STAT 2601</td>
<td>Introductory Statistics 1</td>
<td>3</td>
</tr>
<tr>
<td>STAT 2625</td>
<td>Statistical Literacy and Critical Reasoning 1</td>
<td>4</td>
</tr>
<tr>
<td>PHIL 2619</td>
<td>Introduction to Logic</td>
<td>3</td>
</tr>
</tbody>
</table>

1 Courses are part of the Ohio Transfer Module and are guaranteed to transfer to any of Ohio’s public institutions of higher education as a subject area general education credit. Ohio’s Department of Higher Education maintains an up-to-date list of OTM approved courses through the OTM reporting system. (https://reports-cems.transfercredit.ohio.gov/pg_6/?17195033559833::NO:6::)

Capstone
Bachelor’s degree seeking students must complete one of the following courses within their major:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMER 4810</td>
<td>Independent Project in American Culture</td>
<td>1-3</td>
</tr>
<tr>
<td>ANTH 4860</td>
<td>Senior Thesis 2</td>
<td>3</td>
</tr>
<tr>
<td>ART 4803</td>
<td>Senior Seminar</td>
<td>3</td>
</tr>
<tr>
<td>ART 4889</td>
<td>Seminar in Art History</td>
<td>3</td>
</tr>
<tr>
<td>ASTR 4815</td>
<td>Undergraduate Astronomy Research</td>
<td>3</td>
</tr>
</tbody>
</table>

3 Although the courses is permitted to be taken multiple times, it only counts as 1 activity course.

4 Although this courses is more than one credit, it only counts as one activity courses. The number of classes (2) is what s required, regardless of how many credits each individual course.

Physical Activity Courses to be used with KSS 1500 Physical Activity Core Concepts

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>KSS 1502</td>
<td>Volleyball</td>
<td>1</td>
</tr>
<tr>
<td>KSS 1507</td>
<td>Volleyball 2</td>
<td>1</td>
</tr>
<tr>
<td>KSS 1508</td>
<td>Group Cycling</td>
<td>1</td>
</tr>
<tr>
<td>KSS 1509</td>
<td>Meditation</td>
<td>1</td>
</tr>
<tr>
<td>KSS 1510</td>
<td>Archery</td>
<td>1</td>
</tr>
<tr>
<td>KSS 1511</td>
<td>Badminton</td>
<td>1</td>
</tr>
<tr>
<td>KSS 1512</td>
<td>Bowling</td>
<td>1</td>
</tr>
<tr>
<td>KSS 1513</td>
<td>Bowling 2</td>
<td>1</td>
</tr>
<tr>
<td>KSS 1514</td>
<td>Fencing 1</td>
<td>1</td>
</tr>
<tr>
<td>KSS 1515</td>
<td>Fencing 2</td>
<td>1</td>
</tr>
<tr>
<td>KSS 1516</td>
<td>Boxing for Beginners</td>
<td>2</td>
</tr>
<tr>
<td>KSS 1519</td>
<td>Racquetball</td>
<td>1</td>
</tr>
<tr>
<td>KSS 1520</td>
<td>Golf 1</td>
<td>1</td>
</tr>
<tr>
<td>KSS 1521</td>
<td>Golf 2</td>
<td>1</td>
</tr>
<tr>
<td>KSS 1522</td>
<td>Tennis 1</td>
<td>1</td>
</tr>
<tr>
<td>KSS 1523</td>
<td>Tennis 2</td>
<td>1</td>
</tr>
<tr>
<td>KSS 1526</td>
<td>Marksmanship</td>
<td>1</td>
</tr>
<tr>
<td>KSS 1529</td>
<td>Recreational Games</td>
<td>1</td>
</tr>
<tr>
<td>KSS 1530</td>
<td>Learn to Swim</td>
<td>1</td>
</tr>
<tr>
<td>KSS 1531</td>
<td>Aquatics 2</td>
<td>1</td>
</tr>
<tr>
<td>KSS 1534</td>
<td>Fitness Swimming</td>
<td>1</td>
</tr>
<tr>
<td>KSS 1537</td>
<td>Aquatic Exercise</td>
<td>1</td>
</tr>
<tr>
<td>KSS 1544</td>
<td>Step Aerobics</td>
<td>1</td>
</tr>
<tr>
<td>KSS 1545</td>
<td>Fold and Square Dance</td>
<td>1</td>
</tr>
<tr>
<td>KSS 1547</td>
<td>Flexibility and Core Training</td>
<td>1</td>
</tr>
<tr>
<td>KSS 1548</td>
<td>Aerobic Dance</td>
<td>1</td>
</tr>
<tr>
<td>KSS 1549</td>
<td>Varsity Competition</td>
<td>1</td>
</tr>
<tr>
<td>KSS 1550</td>
<td>Pilates</td>
<td>1</td>
</tr>
<tr>
<td>KSS 1551</td>
<td>Student Athlete Experience</td>
<td>1</td>
</tr>
<tr>
<td>KSS 1552</td>
<td>Yoga</td>
<td>1</td>
</tr>
<tr>
<td>KSS 1553</td>
<td>Yoga 2</td>
<td>1</td>
</tr>
<tr>
<td>KSS 1554</td>
<td>Fitness Walking</td>
<td>1</td>
</tr>
<tr>
<td>KSS 1555</td>
<td>Jogging</td>
<td>1</td>
</tr>
<tr>
<td>KSS 1556</td>
<td>Racquetball 2</td>
<td>1</td>
</tr>
<tr>
<td>KSS 1557</td>
<td>Weight Training</td>
<td>1</td>
</tr>
<tr>
<td>KSS 1558</td>
<td>Physical Fitness for Life</td>
<td>2</td>
</tr>
<tr>
<td>KSS 1563</td>
<td>Rock Climbing</td>
<td>1</td>
</tr>
<tr>
<td>KSS 1564</td>
<td>Bicycling</td>
<td>1</td>
</tr>
<tr>
<td>KSS 1565</td>
<td>Self Defense</td>
<td>1</td>
</tr>
<tr>
<td>KSS 1566</td>
<td>Judo</td>
<td>1</td>
</tr>
<tr>
<td>KSS 1568</td>
<td>Taekwondo/Karate</td>
<td>1</td>
</tr>
<tr>
<td>KSS 2632</td>
<td>Skin and Scuba Diving</td>
<td>2</td>
</tr>
<tr>
<td>KSS 2635</td>
<td>Open Water Scuba Diving</td>
<td>1</td>
</tr>
<tr>
<td>KSS 2637</td>
<td>Skin, Scuba and Openwater Diving</td>
<td>3</td>
</tr>
<tr>
<td>KSS 2697</td>
<td>Camping</td>
<td>2</td>
</tr>
<tr>
<td>MUEN 0004</td>
<td>University Chorus 3</td>
<td>1</td>
</tr>
<tr>
<td>MUEN 0006</td>
<td>Marching Band 3</td>
<td>1</td>
</tr>
</tbody>
</table>
Ohio Residency

Ohio student residency for state subsidy and tuition surcharge purposes

1. Intent and authority
   a. It is the intent of the chancellor of the Ohio Department of Higher Education in promulgating this rule to exclude from treatment as residents, as that term is applied here, those persons who are present in the state of Ohio primarily for the purpose of receiving the benefit of a state-supported education.
   b. This rule is adopted pursuant to Chapter 119 of the Revised Code, and under the authority conferred upon the chancellor of the Ohio Department of Higher Education by section 3333.31 of the Revised Code.

2. Definitions
   a. "Resident" shall mean any person who maintains a twelve-month place or places of residence in Ohio, who is qualified as a resident to vote in Ohio and receive state public assistance, and who may be subjected to tax liability under section 5747.02 of the Revised Code, provided such person has not, within the time prescribed by this rule, declared himself or herself to be or allowed himself or herself to remain a resident of any other state or nation for any of these or other purposes.
   b. "Financial support" as used in this rule, shall not include grants, scholarships and awards from persons or entities which are not related to the recipient.
   c. An "institution of higher education" shall have the same meaning as "state institution of higher education" as that term is defined in section 3345.011 of the Revised Code, and shall also include private medical and dental colleges which receive direct subsidy from the state of Ohio.
   d. "Domicile" as used in this rule is a person's permanent place of abode, so long as the person has the legal ability under federal and state law to reside permanently at that abode. For the purpose of this rule, only one domicile may be maintained at a given time.
   e. "Dependent" shall mean a student who was claimed by at least one parent or legal guardian as a dependent on that person's internal revenue service tax filing for the previous tax year.
   f. "Residency Officer" means the person or persons at an institution of higher education that has the responsibility for determining residency of students under this rule.
   g. "Community Service Position" shall mean a position volunteering or working for:
      i. VISTA, Americorps, City Year, the Peace Corps, or any similar program as determined by the chancellor of the Ohio Department of Higher Education; or
      ii. An elected or appointed public official for a period of time not exceeding twenty-four consecutive months.

3. Residency for subsidy and tuition surcharge purposes.

The following persons shall be classified as residents of the state of Ohio for subsidy and tuition surcharge purposes:

- A student whose spouse - or a dependent student, at least one of whose parents or legal guardian - has been a resident of the state of Ohio for all other legal purposes for twelve consecutive months or more immediately preceding the enrollment of such student in an institution of higher education.
• A person who has been a resident of Ohio for the purpose of this rule for at least twelve consecutive months immediately preceding his or her enrollment in an institution of higher education and who is not receiving, and has not directly or indirectly received in the preceding twelve consecutive months, financial support from persons or entities who are not residents of Ohio for all other legal purposes.

• A dependent student of a parent or legal guardian, or the spouse of a person who, as of the first day of a term of enrollment, has accepted full-time, self-sustaining employment and established domicile in the state of Ohio for reasons other than gaining the benefit of favorable tuition rates. Documentation of full-time employment and domicile shall include both of the following documents:
  a. A sworn statement from the employer or the employer’s representative on the letterhead of the employer or the employer’s representative certifying that the parent, legal guardian or spouse of the student is employed full-time in Ohio.
  b. A copy of the lease under which the parent, legal guardian or spouse is the lessee and occupant of rented residential property in the state; a copy of the closing statement on residential real property located in Ohio of which the parent, legal guardian or spouse is the owner and occupant; or if the parent, legal guardian or spouse is not the lessee or owner of the residence in which he or she has established domicile, a letter from the owner of the residence certifying that the parent, legal guardian or spouse resides at that residence.

Additional criteria which may be considered in determining residency may include but are not limited to the following:

1. Criteria evidencing residency:
   a. If a person is subject to tax liability under section 5747.02 of the Revised Code;
   b. If a person qualifies to vote in Ohio;
   c. If a person is eligible to receive Ohio public assistance;
   d. If a person has an Ohio’s driver’s license and/or motor vehicle registration.

2. Criteria evidencing lack of residency
   a. If a person is a resident of or intends to be a resident of another state or nation for the purpose of tax liability, voting, receipt of public assistance, or student loan benefits (if the student qualified for that loan program by being a resident of that state or nation);
   b. If a person is a resident or intends to be a resident of another state or nation for any purpose other than tax liability, voting, or receipt of public assistance (see paragraph (D)(2)(a) of this rule).
   c. For the purpose of determining residency for tuition surcharge purposes at Ohio’s state-assisted colleges and universities, an individual’s immigration status will not preclude an individual from obtaining resident status if that individual has the current legal status to remain permanently in the United States.

Exceptions to the general rule of residency for subsidy and tuition surcharge purposes:

1. A person who is living and is gainfully employed on a full-time or part-time and self-sustaining basis in Ohio and who is pursuing a part-time program of instruction at an institution of higher education shall be considered a resident of Ohio for these purposes.

2. A person who enters and currently remains upon active duty status in the United States military service while a resident of Ohio for all other legal purposes and his or her dependents shall be considered residents of Ohio for these purposes as long as Ohio remains the state of such person’s domicile.

3. A person on active duty status in the United States military service who is stationed and resides in Ohio and his or her dependents shall be considered residents of Ohio for these purposes.

4. A veteran, veteran’s spouse, or dependent of a veteran who meets both of the following conditions:
   a. Served one of more years on active military duty and was honorably discharged, or received a medical discharge, or was killed while serving on active duty, and
   b. Establishes domicile in Ohio as of the first day of the term of enrollment.

5. A person who is transferred by his employer beyond the territorial limits of the fifty states of the United States and the District of Columbia while a resident of Ohio for all other legal purposes and his or her dependents shall be considered residents of Ohio for these purposes as long as Ohio remains the state of such person’s domicile as long as such person has fulfilled his or her tax liability to the state of Ohio for at least the tax year preceding enrollment.

6. A person who has been employed as a migrant worker in the state of Ohio and his or her dependents shall be considered a resident for these purposes provided such person has worked in Ohio at least four months during each of the three years preceding the proposed enrollment.

7. A person who was considered a resident under this rule at the time the person started a community service position as defined under this rule, and his or her spouse and dependents, shall be considered a resident of Ohio while in service and upon completion of service in the community service position.

8. A person who graduated from an Ohio high school, left the state, and returns to enroll in an Ohio public institution of higher education and establishes domicile in the state.

9. A person who returns to the state of Ohio due to marital hardship, takes or has taken legal steps to end a marriage, and reestablishes financial dependence upon a parent or legal guardian (receives greater than fifty percent of his or her support from the parent or legal guardian), and his or her dependents shall be considered residents of Ohio.

10. A person who is a member of the Ohio National Guard and who is domiciled in Ohio, and his or her spouse and dependents, shall be considered residents of Ohio while the person is in Ohio national guard service.

11. A person who is eligible, or whose benefits have been exhausted or have expired, for benefits under the Post 9/11 Veterans Educational Assistance Act of 2008 or any prior federal act establishing veterans’ education benefits, who has been honorably discharged or released from service, who, as of the first day of a term of enrollment, is domiciled in Ohio, and his or her spouse and dependents, shall be considered residents of Ohio for these purposes as long as Ohio remains the state of such person’s domicile.

Documentation determined to be acceptable by the institution:

1. DD214 or other military document showing honorable discharge.

2. Documentation of domicile shall include a copy of the lease under which the person or spouse is the lessee and occupant of rented residential property in the state; a copy of the closing statement on residential real property located in Ohio of which the person or spouse is the owner and occupant; or if the person or spouse is not the lessee or owner of the residence in which he or she has established domicile, a letter from the owner of the residence certifying that the person or spouse resides at that residence.

Procedures

1. A dependent person classified as a resident of Ohio for these purposes under the provisions of paragraph (C)(1) of this rule and who is enrolled in an institution of higher education when his or her parents or legal guardian removes their residency from the state of Ohio shall continue to be considered a resident during continuous full-time enrollment and until his or her completion of any one academic degree program.

2. In considering residency, removal of the student or the student’s parents or legal guardian from Ohio shall not, during a period of twelve months following such removal, constitute relinquishment of Ohio residency status otherwise established under paragraph (C)(1) or (C)(2) of this rule.
3. For students who qualify for residency status under paragraph (C)(3) of this rule, residency status is lost immediately if the employed person upon whom resident student status was based accepts employment and establishes domicile outside Ohio less than twelve months after accepting employment and establishing domicile in Ohio.

Reclassification

1. Any person once classified as a nonresident must apply to the institution he or she attends for reclassification as a resident of Ohio for these purposes if such person in fact wants to be reclassified as a resident. It is the student’s responsibility to initiate contact. Should such person present clear and convincing proof that no part of his or her financial support is or in the preceding twelve consecutive months has been provided directly or indirectly by persons or entities who are not residents of Ohio for all other legal purposes, such person shall be reclassified as a resident. Evidentiary determinations under this rule shall be made by the institution which may require, among other things, the submission of documentation regarding the sources of a student’s actual financial support.

2. Any reclassification of a person who was once classified as a nonresident for these purposes shall have prospective application only from the date of such reclassification.

3. Any institution of higher education charged with reporting student enrollment to the chancellor of the Ohio Department of Higher Education for state subsidy purposes and assessing the tuition surcharge shall provide individual students with a fair and adequate opportunity to present proof of his or her Ohio residency for purposes of this rule. Such an institution may require the submission of affidavits and other documentary evidence which it may deem necessary to a full and complete determination under this rule.

Revised 4/04/19

Student Services

Office of the Registrar

The Office of the Registrar, a department within the Division of Institutional Effectiveness and Student Success, provides quality service to YSU students within all areas related to enrollment by supporting the systems and policies of the learning environment and safeguarding the integrity of the university’s records and regulations. The department is committed to:

- Providing a proficient and holistic level of customer service that will lead to increased student retention and persistence.
- Maintaining an accurate permanent record for each student.
- Furnishing necessary information, support, and referrals to the university community and outside agencies in an efficient manner while consistently administering federal regulations.
- Supporting students, faculty, and staff by integrating the latest technology into our services.

The office is comprised of three main areas: Records, Registration, and the Penguin Service Center. All are located in Meshel Hall, room 232. For more information, call (330) 941-6000.

Career & Academic Advising

The Office of Career & Academic Advising provides individualized career and exploratory advising for YSU students and alumni.

EXPLORING ADVISING

Exploratory Advisors will help you identify required general education coursework while you explore majors, careers, and opportunities to get involved at YSU.

- This program helps to assure you will not waste time, money or energy while identifying your major/career path and establishing long-term goals.

SELF-ASSESSMENT

Complete self-assessment tools with your Career Development Coordinator and begin to identify your VIPS. These tools will help you choose the best major!

- Values >> Interests >> Personality >> Strengths

CAREER DEVELOPMENT SERVICES

Learn how to build your professional brand with a Coordinator or Career Peer.

- Resume and cover letter formatting and review
- Handshake and LinkedIn profile development
- Graduate School application support
- Job and internship search strategies
- Mock Interviews for the internships, and professional jobs

HANDSHAKE Job/Internship Posting Board

Set yourself up for success with YSU’s professional social network.

- Introduce yourself by customizing your Handshake professional profile
- Upload your resume to easily apply for local and national positions
- Have your professional brand reviewed and receive feedback from experts

Join Handshake by following this link (https://ysu.joinhandshake.com/login (https://ysu.joinhandshake.com/login/))

For more information, visit Career & Academic Advising (http://www.ysu.edu/career-academic-advising (http://www.ysu.edu/career-academic-advising/)) on the web.

Counseling Services

The YSU Student Counseling Services provides short term, confidential mental health counseling, consultation, outreach, and referral services to our currently enrolled students. Common issues that we address include anxiety, depression, stress, relationship concerns, difficulty managing multiple roles and other issues. Juggling life’s responsibilities is a challenge that causes many individuals to feel anxious, confused, or overwhelmed at times. We are here to help. The Student Counseling Services Center is located in Room 2110, Kilcawley Center. Our office hours are Monday - Friday, 8:00 a.m. - 5:00 p.m. Our phone number is (330) 941-3737 and/or visit Student Counseling Services (http://www.ysu.edu/student-counseling-services/).

Day Care

Students who have younger children may wish to place them in on-campus childcare centers.

Wee Care Day Care and Learning Centre is the official provider of childcare services to Youngstown State University students, faculty, staff, and alumni. Special discounted rates are available and we accept ODJFS contracts as well. The Center has a professionally trained staff that takes care of children ages six weeks to 10 years, including preschool and pre-K State approved curriculum based programs. The Centre is located in Fedor Hall and is open from 5:00 a.m. to 9:00 p.m. The phone number is (330) 941-2936.

Wee Care is equipped with 24-hour-a-day video monitoring and a very strict sign-in and sign-out policy. Besides the convenience of its on campus location, Wee Care has six other locations throughout Mahoning and Trumbull County. Students especially like the flexible scheduling options to meet their university needs.

Students may also be eligible for child care through the Mahoning County Educational Service Center, which has day care facilities throughout Mahoning.
County, including one on the YSU campus. Please call (330) 965-7828 for more information.

Partial reimbursement is also available to University students for either Wee Care Day Care or other licensed off-campus day care facilities. Contact the Office of Financial Aid and Scholarships at (330) 941-3501 for more information.

For more information, visit Wee Care Day Care (http://www.weecareohio.com/partners.html).

**First-Year Student Services**

**First Year Student Services**

First Year Student Services has the main goal of making sure all of our students have a successful first year on campus. We do this by providing important information, opportunities to connect with peers, mentors who can assist students, and more. Our office contains five main programs and services listed below:

**Orientation:**

All incoming first year students will attend one of our programs that happen prior to the semester beginning. During Orientation, students will learn about the expectations of the university, make connections to other incoming students, and register for their academic courses. The orientation program for new transfer students is a shorter version that offers insight into YSU, however transfer students are able to register for classes even before attending orientation. For any questions regarding Orientation, please contact us at orientation@ysu.edu or 330-941-2131.

**IGNITE:**

IGNITE is a program for all Summer and Fall start first year students. It takes place the two days before Fall semester begins and is aimed at allowing the entire incoming class the opportunity to connect to each other, to campus, and to resources offered. It’s a dynamic and engaging two days to welcome students to the community.

**Peer Leaders:**

Peer Leaders are YSU students who are dedicated to helping first year students succeed on campus. They serve as a main point of contact, referral agent, and source of knowledge to students. Any first year student can count on their Peer Leader to answer questions, get them connected to campus, and help them find answers to any questions. Peer Leaders work with students for their entire first year at YSU.

**First Year Leadership Programs:**

We are proud to offer programming that will help first year students build the skills they need to be successful inside and outside of the classroom. Our programs will teach essential skills, theory, and knowledge while also allowing students to apply this to their collegiate experience. Programs are open to all first year students.

**Parent and Family Programs:**

We pride ourselves on welcoming the entire family to the Penguin community. We send a monthly newsletter to interested family members sharing campus information and asking for assistance in the first year transition. We also offer programming during Family Day and other university events.

**Kilcawley Center**

Since its opening in April 1974, Kilcawley Center has served as the heart of campus. This not only refers to its central location on campus, but also to the many services, conveniences, programs, and amenities it provides to the University community. The Center’s casual atmosphere, comfortable lounges, and attractive dining areas focus on making free-time activity an integral part of a YSU education. Through cultural, social, and recreational programming, Kilcawley Center provides for rich and diverse experiences for YSU students. Visit Kilcawley Center (http://www.kc.ysu.edu) for details on services, hours of operation, staff directory, the daily calendar of events, and student job postings.

Kilcawley Center’s study lounges are renowned for their comfortable chairs and couches that are perfect for studying, relaxing, or napping. The lounges and restaurant dining areas in Kilcawley Center provide high-speed wireless Internet access. The Center offers convenient ATM banking, copy services at Printing Services @ Kilcawley Center, as well as offices for Student Government, Student Media, and Rookery Radio. Kilcawley Center houses sixteen seminar rooms and a large multi-purpose room. On a daily basis, these rooms host luncheons, workshops, seminars, lectures, organization meetings, and programs.

Graphic Services, located on the lower level of the Center, designs flyers, banners, posters, brochures, and graphics for student organizations and student projects.

Kilcawley Center offers diverse choices in dining. Located on the lower level of Kilcawley are:

- YSU Wendy’s with all your favorites
- Jamba Juice (smoothies, juices, and steel cut oatmeal)
- KC Food Court - which includes Denny’s “The Den” (bold breakfasts, grilled burgers, hot sandwiches, and fresh salads)
- Chop’d & Wrap’d (made-to-order salads and wraps)
- 2.Mato (classic Italian favorites including specialty pizzas)
- Dunkin’ Donuts
- The Melt Lab (Brings the delicious, comforting flavors of the perfect sandwich - grilled cheese!)
- Hissho Sushi (Freshly prepared sushi daily on-site is the way we roll. Everyday our chefs prepare delicious sushi that will keep you happy and healthy)

Located on the upper level is Kilcawley Center’s popular Chick-fil-A Restaurant offering delicious chicken that is 100% breast meat, no fillers or additives, and is hand-breaded in our kitchens. Visit Dine On Campus (http://www.dineoncampus.com/ysu/) for catering, campus places to eat, and today’s menus including sustainability and nutritional information.

Pet’s Treats & More is a popular place for quick snacks and beverages, along with U.S. postage stamps and single-dose healthcare items. Visit Pet’s Treats & More to choose delicious chocolates and candy favorites in glass candy jars. Pet’s Treats & More is located on the lower level of Kilcawley Center.

**Campus Meal Plans** are available for purchase and are offered with a variety of dining options. A YSU meal plan brochure is available at Meal Plans (http://cms.ysu.edu/administrative-offices/housing-and-residence-life/meal-plan-information/). For answers to frequently asked meal plan questions or to purchase a meal plan, visit the YSU Y Card (https://ycard.ysu.edu/) site.

Adding **Pete’s Points** to your YSU ID card will allow you to debit your purchase at ANY Kilcawley dining location including Pete’s Treats & More. Pete’s Points are also accepted at many nearby locations both on and off campus and are listed at Times2Dine (http://times2dine.ysu.edu). Visit the Penguin Xing for more information. Visit the Y Card (https://ycard.ysu.edu/) site to add Pete’s Points or Flex Dollars on the fly.

Chartwells provides a full catering menu for small groups to large dinner buffets. Once you have secured a room reservation in Kilcawley Center, at a site location on or off campus, Chartwells catering director will help you coordinate every detail to ensure your event is a success—whether you are planning a quick box lunch or an elaborate buffet. Contact the Chartwell Catering Department at (330) 941-1979, visit Dine On Campus (http://www.dineoncampus.com/ysu/), or visit the office located on the lower level of Kilcawley Center.
The Office for Student Experience is located on the east wing of Kilcawley Center under Kilcawley House, beneath the red awning that says, “University Housing”. This suite of offices includes the office of Housing and Resident Life, the office of the Vice President for student affairs, and the office of Student Conduct. The upper level of Kilcawley Center includes Kilcawley Staff Offices, Disability Services, Student Counseling Services, and Student Outreach and Support. Student Activities, Student Government, and student organizations/mailboxes are in the west end of Kilcawley, as is the Center for Student Progress. The Cove is an extension of Kilcawley Center located on the upper level on the west end of the building. The Cove is where students are welcome to lounge, study, eat, and participate in recreational games and activities. Other services in the Cove include our Giant Eagle Penguin Pickup Service and Hissho Sushi. For more information and hours of operation visit The Cove (http://cms.ysu.edu/administrative-offices/kilcawley-center/cove/). The Andrews Student Recreation and Wellness Center can also be accessed from the upper level of Kilcawley Center.

The Penguin Xing serves as the information center and lost & found for the University, registers students for campus locker rentals, retails commuters, faculty and staff meal plans, and takes photos for all faculty, staff and student ID Cards on campus. The Penguin Xing is located on the upper level of the Center near the main lobby.

**Mercy Health Wick Primary Care at YSU**

Mercy Health Wick Primary Care at YSU is located on the corner of Wick and Lincoln Avenue. The Center provides health care to all currently enrolled YSU students – both resident and commuter students. These services are provided because of the Student Health Fee of $34 that is paid by all students each semester. The mandatory fee provides revenue to Mercy Health System to give students access to their Primary Care Facility. The center will be staffed by a full-time primary care physician and advanced practice provider. It will also provide the following services below:

- Full service primary care practice:
  - Establish and develop continuity of care
  - Address acute issues
  - Walk-In-Care location for non-scheduled visits
  - Preventative care
  - Extended hours
  - Lab draw site
  - Services also include access to MyChart. This is a patient portal which allows direct communication with the practice and provider, prescription refills, electronic visits and access to a patient’s medical record.

Mental health services:

- Mental health, behavioral health and addiction issues addressed
- Two half-days per week
- Psychiatrist

Health care is available for illness, injury, first aid, and routine health checks. Health screening tests, physical exams for sports and academic programs, gynecological exams, as well as consultations and referrals, are provided. Flu and other immunizations are also given; however, there are charges for these injections.

Office visits are free. Students do not need to have health insurance to use the Center’s services. Blood tests, x-rays, lab tests, etc., ordered by a physician are done off campus at the student’s choice of provider and at the student’s expense.

Student records are kept strictly confidential. Information cannot be released to anyone without the written consent of the student. Certain public health diseases, however, must be reported to the Department of Health as required by law.

For more information, visit Student Health Clinic (https://cms.ysu.edu/administrative-offices/student-health/student-health/).

**Photo Identification Card**

The Division of Student Experience issues a photo identification card to every student enrolled at the University. The student must carry the card while on campus. The use of this card is restricted to the student to whom it was issued. Lost or stolen cards must be replaced at the student’s expense (see “Student Fees and Charges” for amount). To replace the card, the student must present proper identification (e.g. driver’s license) in Kilcawley Center at the Penguin Xing and pay the applicable replacement fee. The photo identification card is the property of the University and must be surrendered by the student upon request by University officials.

**Veterans Affairs**

Located in the Veterans Resource Center at 633 Wick Avenue, the Office of Veterans Affairs (OVA) serves as a central location to discuss issues, questions, or concerns current and prospective military and veteran students may have regarding their enrollment. The University recognizes the sacrifice of military service and waives the undergraduate and graduate application and new student orientation fees for all veterans and currently serving military members. To have the application fee waived, the applicant must provide a DD Form 214 or other verification of honorable service in the armed forces of the United States.

After their initial registration, all military and veteran students are then qualified for the following veteran benefits at YSU:

- Priority registration
- Enrollment into select “Veterans Friendly” GER courses
- Voluntary membership into the “Armed Forces Student Association” (YSU’s Student Veteran Organization)
- Evaluation of military training for possible college credit
- GI Bill counseling and certification
- Assistance with coordination of periods of military service during the semester
- Advocacy and counseling services
- Email information letters with pertinent information related to student veterans
- Special recognition at graduation

The OVA also works with the Office of Veterans Affairs Advisory Council, an independent body that guides and supports the university’s efforts to serve those who have or are serving in the armed forces. The Council is a representative body drawn from faculty, students, staff, and the community.

The Veterans Resource Center (VRC) on campus at 633 Wick Avenue is a 6,000 square foot, fully handicap accessible facility that is the first of its kind at any university in Ohio. The VRC features lounge space, a computer lab, meeting rooms, a community/class room, kitchenette, ample office space for outside veteran-related organizations and much more. The VRC is open to all student veterans, currently serving military members and military dependents that are using veteran’s education benefits.

Students and all interested parties can contact the OVA by visiting our OVA (http://cms.ysu.edu/administrative-offices/veterans-affairs/office-veteran-affairs/) website, emailing us at veterans@ysu.edu, or calling the office at (330) 941-2503. Individual person-to-person meetings are available and encouraged.

**University Housing**

Living in one of University Housing’s four residence halls provides the benefit of community, a focus on wellness, mentorship, and co-curricular education. We empower students to set guidelines for their community and hold each other accountable to mutual expectations. Our full-time live-in professional
and graduate staff members approach connecting with residential students based on the values of the department, including diversity/inclusion, wellness, and academics. They conduct regular conversations with residents regarding their overall goals for the semester and check-in periodically to ensure that these goals are being met. Resident Assistants (RAs) are upper-class students further along in their coursework than traditional first-year students. They regularly help residents navigate campus and academic culture and plan a variety of events to help residents feel safe and included in the residential and YSU community.

Housing & Residence Life

YSU owns and operates four residence halls and one small apartment building.

- **Kilcawley House**, located on University Plaza, is a traditional residence hall.
- **Lyden House** and **Cafaro House**, located on Madison Avenue, are both traditional residence halls.
- **Wick House** located on Wick Avenue, is a small historic home that was converted into a residence hall.
- **Weller House** also located on Wick Avenue, is a small building with 16 efficiency apartments.

On-campus living provides students many advantages and opportunities. University Housing facilities are structured environments with procedures and regulations addressing community issues, including noise, safety, guests and security. University residence halls have full-time, live-in professional staff members and part-time, live-in student staff members who oversee the operation of the halls and assist students with the challenges of daily college life. Each building has security features, including 24-hour staffed desks, security cameras in public areas, and locking exterior doors that require specific access cards for all residents. On-campus living is a good place to get to know many students in a short period of time. Sharing bathrooms, lounge space, and corridors with a group means you can’t help but make friends quickly. Being on campus also means that classes, the library, the student center, and the wellness center are never very far away.

One perk of living in University Housing is that students can partake in an extension of the Penguin Tuition Promise, through which they “lock in” a housing rate their first year. This rate, which includes the cost of room and rates-and-contracts/

Once a student has been accepted to YSU, they can submit a housing application*. The application costs $35.00 and includes the cost of a prepayment at the conclusion of the application. This prepayment will be added as a credit to a student’s bill at the beginning of fall semester.

* Note: As part of the application, students have the opportunity to self-select their building, room, and roommate.

Kilcawley House

Kilcawley House was built in 1965 and sits at the heart of YSU’s campus. Students living in this building are uniquely situated to access everything on campus, including Kilcawley Center, class building, the library, and more. Housing just about 225 students, Kilcawley underwent a renovation in 2015. The newly updated rooms have wall-to-wall carpet and new furniture. More information about the building, including floor plans and other building amenities, can be found on our website (https://ysu.edu/housing-and-residence-life/kilcawley-house/).

Lyden House

Lyden House opened in 1991 as just the second residence hall on YSU’s campus. Located next to both Cafaro House and Christman Dining Common, Lyden is the largest of the residence halls, housing about 330 students. More information about the building, including floor plans and other building amenities, can be found on our website (https://ysu.edu/housing-and-residence-life/lyden-house/).

Cafaro House opened in the fall of 1995 and houses students in the Honors College. This building houses students of all genders, features a suite-style floor set-up, and is home to about 280 students. More information about the building, including floor plans and other building amenities, can be found on our website (https://ysu.edu/housing-and-residence-life/cafaro-house/).

Wick House

Located on Wick Avenue next to the Arms Family Museum of Local History and near the Butler Institute of American Art, Wick House is a restored mansion that was at one time the home of the historic Youngstown Wick family. This residence hall houses just 32 students, and is reserved for students who have lived on campus for at least one year. Due to its historic nature, each room is unique in shape and size. More information about the building, including floor plans and other building amenities, can be found on our website (https://ysu.edu/housing-and-residence-life/wick-house/).

Weller House

Weller House underwent renovations in 2017, and features 16 efficiency apartments. In order to best meet the needs of our students, this building is reserved for graduate students or students with families (couples or those with children). Apartments range in size from studios to three-bedroom apartments. Each features a full kitchen, living/dining space, and full bathroom, in addition to the bedroom areas. The basement also features a newly updated community playroom with TV and sitting area. While students living in this building are exempt from the Penguin Tuition Promise, they are also not required to have meal plans. Our rates are also very competitive. More information about the building, including floor plans and other building amenities, can be found on our website (https://ysu.edu/housing-and-residence-life/weller-house/).

University Courtyard Apartments

In 2011, YSU took on ownership of the University Courtyard Apartments. The apartments are run by a contracted company called RISE management, who oversee all operations of the building, including billing, contracts, communication with students, and more. These two apartment buildings are located in the Wick Oval area, just minutes away from the center of campus and adjacent to Bliss Hall. The apartments include, two, and four bedroom apartments and each apartment comes equipped with an upgraded appliance package that includes stainless steel full size refrigerator, stove, microwave and dishwasher. The rent is all-inclusive, which means the residents pay one amount for everything including all utilities, Wi-Fi, high-speed internet access and basic cable TV, and charges are applied to the student’s University bill, so all financial aid can be applied directly towards rent costs.

Christman Dining Commons

Christman Dining Commons, commonly referred to as “Christman” is located adjacent to both Lyden House and Cafaro House. Seating 300 people at a time, the staff can serve up to 600 people per meal period. Most days, Christman
hosts three traditional meal times (breakfast, lunch, and dinner), while on some nights they also feature a “late-night” option starting at 9:00pm.

Christman offers a wide variety of menu options to campus residents, from self-serve cold foods, beverages, and snack selections to staff-served grille specialties and hot entrees. Students can build their own stir-fry daily, while those with food allergies or dietary restrictions can work directly with the chef on meals that meet their needs.

Students living in Kilcawley, Lyden, Cafaro, and Wick Houses are all required to have a meal plan, which is included in their room and board charges. Each meal plan consists of three types of funds: meal swipes for use at Christman, Flex Dollars for use at any other campus dining location, and Pete’s Points to be used at any other campus dining location, as well as some off-campus dining locations with whom we partner.

Commuter students, those living in nearby apartments, staff, and faculty, are also welcome to purchase meal plans, visit Christman Dining Common, or visit any of the other many campus dining options. Daily meal rates, menu options, and more can be found on our website (https://www.dineoncampus.com/ysu/).

**University Housing Partners**

In addition to the University Courtyards Apartments, YSU has strong relationships with the managers of other local apartment buildings that primarily serve YSU students. If you are interested in other housing options than those listed above, you can find more information about some of these options on our website (https://ysu.edu/housing-and-residence-life/campus-housing-options/).

**Student Activities**

Youngstown State University offers a broad range of campus activities geared toward enriching and expanding the student experience beyond the classroom. Participating in student government, intramurals, student publications, art and music groups, and student organizations gives students opportunities to make new friends; meet people from backgrounds, cultures, and perspectives different from their own; develop leadership skills; and balance the demands of university life with the need for relaxation and recreation. Student programming offerings include Welcome Week, Homecoming, YSU Serves Week, Diversity Programming Series, and other events throughout the year.

For more information visit the Student Activities (http://cms.ysu.edu/administrative-offices/student-activities/student-activities/) page.

**Penguin Productions**

Penguin Productions is a student group under the Division of Student Experience charged with assessing, initiating, implementing, and evaluating major events for almost 13,000 students on the campus of Youngstown State University.

Penguin Productions conducts campus-wide assessments of students' entertainment interests and identifies possible performers and venues. Performers such as Zac Brown Band, Judah & the Lion, Migos, and Andy Grammer have come to campus or the downtown Covelli Centre. Penguin Productions plans Fall Fire Fest and Federal Frenzy, two campus traditions.

Working with Penguin Productions carries no academic credit or pay, but participants get a behind-the-scenes look at events planning, concert staging, ticket management, and other concert business, including meeting the performers.

For more information about upcoming events or becoming a Penguin Productions board member, please call (330) 941-3575.

**Student Organizations**

There are over 200 student organizations ranging from academic and social awareness to cultural, Greek, and Student Government. Students are invited to take the first step and discover something that engages their interests. Student organization mailboxes are located in the Student Activities Office, Kilcawley Center Annex.

The following is a partial list of the organizations available at YSU. A complete searchable listing of registered student organizations at YSU is available on the Student Organization Directory (http://cms.ysu.edu/administrative-offices/student-activities/student-organizations/) web page.

- Actuarial Science Club
- Alpha Kappa Alpha Sorority
- Alpha Omicron Pi Sorority
- Alpha Phi Delta Fraternity
- Alpha Psi Omega
- Alpha Xi Delta Sorority
- American Institute of Chemical Engineers
- American Marketing Association
- American Society of Civil Engineers
- American Society of Mechanical Engineers
- Anthropology Colloquium
- Armed Forces Student Organization
- Black Student Union
- Bowling Club
- Campus Crusade for Christ
- Catholic Student Association
- Chi Alpha
- Club of Jewish Culture
- College Conservatives
- College Democrats
- Dana Flute Society
- Dana Guitar Association
- Dance Club
- Dance Ensemble
- Delta Sigma Theta Sorority
- Delta Zeta Sorority
- Dungeons and Dragons Club
- Economics Club
- Emergency Medical Services Organization
- Enactus
- Film Club
- French Club
- Guinathon
- Guins Against Cancer
- Greek Campus Life
- Health Education and Physical Education Club
- Hospitality Management Society
- Institute of Electrical and Electronic Engineers
- Institute of Industrial Engineers
- Interfraternity Council
- InterVarsity Christian Fellowship
- Indian Student Association
- Italian Club
- John Quincy Adams Society
Student Activities

- NEOMED
- National Alliance on Mental Illness on Campus
- National Pan-Hellenic Council (NPHC)
- Ohio Collegiate Music Educators Association
- Orthodox Christian Fellowship
- Panhellenic Council
- Pella Penguins
- Philosophy and Religious Studies Club
- Phi Mu Alpha Sinfonia (Music)
- Phi Sigma Rho Engineering Sorority
- Relay for Life
- Rookery Radio
- Room of Requirement
- Rotaract
- Saxophone Society
- Sigma Alpha Epsilon Fraternity
- Sigma Chi Fraternity
- Sigma Tau Gamma Fraternity
- Society of Automotive Engineers
- Society of Human Resource Management
- Society of Women Engineers
- Sociology Club
- Spanish Club (Los Buenos Veciños)
- STEM Leadership Society
- Student American Dental Hygienists Association (SADHA)
- Student Athlete Advisory Committee (SAAC)
- Student Organization for Respiratory Care
- Student Physical Therapy Association
- Student Social Work Association
- Students in Dietetics
- Students In Fashion and Interiors
- Studio 330 (Student AIGA)
- Theta Chi Fraternity
- Urban Gaming Club
- Unscripted: An Improv Club
- YSU Unity SOGIE Society
- Zeta Tau Alpha Sorority
- Zeta Phi Beta Sorority

Greek Life

Greek Life at YSU affords students the opportunity to gain leadership experience and develop a positive social outlet. There are 9 Interfraternity National Pan-Hellenic Council, and Panhellenic groups from which to choose.

For more information visit the Greek Life page.

Student Government Association

The student body of Youngstown State University is represented by Student Government, which operates under constitutional powers granted by the University. The legislative branch of Student Government is composed of representatives from the six undergraduate colleges and the School of Graduate Studies and Research, in proportion to the enrollment of each. All meetings of student government representatives are open to the student body.

Student Government exercises the power to conduct student elections, to recommend students to serve as members of joint faculty-student committees, and to supervise programs financed from its operating budget.

Student Government selects nominees for the two student positions of the University Board of Trustees.

For more information visit the Student Government (http://sga.ysu.edu/) page.

Student Media

The University supports multiple student media outlets. Students can showcase their talents through The Guin, a digital yearbook; The Jambar, a weekly newspaper; The Penguin Review, an annual literary magazine; The Yo Magazine, an annual magazine; and Rookery Radio, an online radio station.

Student media is student run. Policies and procedures concerning student publications are prepared, reviewed and applied by the Student Media Committee.

Student Counseling Services

The YSU Student Counseling Services provides free, short term, confidential mental health counseling, consultation, outreach, and referral services to our currently enrolled students.

Common issues that we address include anxiety, depression, stress, relationship concerns, difficulty managing multiple roles and other issues.

YSU Student Counseling Services has an after-hours phone line. You can call and speak with a mental health professional who can assist with immediate support, crisis intervention and stabilization. (This is not for scheduling appointments or leaving messages).

To access, call the YSU Student Counseling Services at 330-941-3737 and after the brief message, press “1” to be connected to a mental health professional. This is available to all currently registered YSU students or anyone concerned about a currently registered student.

The Student Counseling Services is located in Room 2082, 2110 Kilcawley Center. Our office hours are Monday - Friday, 8:00 a.m. - 5:00 p.m. Our phone number is (330) 941-3737 and/or visit Student Counseling Services.

Department of Campus Recreation - Andrews Student Recreation and Wellness Center

The Department of Campus Recreation provides creative and innovative, instructed or self-led wellness, and recreational programming to meet the diverse needs of our students and the YSU community.

THE DEPARTMENT IS COMMITTED TO:

- Promoting a holistic approach to wellness, and developing healthier lifestyle choices that lead to personal and professional growth.
- Providing state of the art services and facilities.
- Integrating diverse learning, leadership opportunities and wellness perspectives with social, economic and global ideas from the Youngstown State community that compliments the academic mission of Youngstown State University.

STUDENT LEARNING OUTCOMES

- Students will be able to practice a holistic approach to wellness and developing healthier lifestyle choices that lead to personal and professional growth.
- Students will learn short and long term benefits of having facilities and equipment that are cutting-edge, universally designed, and well maintained.
- Through diverse learning, wellness perspectives, and leadership opportunities, students will demonstrate civic, social, and cultural
awareness and direction for betterment of the University, city, region, and world.

For more information please visit: www.ysu.edu/campus-recreation (http://www.ysu.edu/campus-recreation/)

Campus Recreation Club Sports

Club Sports at Youngstown State University provides students with opportunities to be involved, compete at a high level, and have a sense of community. The focus of Club Sports blends the aspects of learning new skills and meeting new people while continuing with the sport you love. Broaden your college experience and join a Club Sport today! Don't see the sport you want to play? You can start your own. For more information, contact Club Sports via email: clubsport@ysu.edu or by phone: 330-941-2239.

Current club sports include:

- Bass Fishing
- Bowling
- Clay Target
- Equestrian
- eSports
- Fencing
- Hip Hop Dance
- Men's Lacrosse
- Women's Lacrosse
- Racquetball
- Men's Rugby
- Men's Soccer
- Women's Soccer
- Softball (transitional club*)
- Spikeball
- Tennis
- Track
- Ultimate Frisbee
- Men's Volleyball
- Women's Volleyball

Art

The Department offers numerous courses that are open to all university students. It also hosts multiple art exhibition spaces across campus, including those housed in Bliss Hall, the John J. McDonough Museum of Art (https://ysu.edu/mcdonough-museum/), and Tod Hall. All students are encouraged to visit and explore the diverse artwork that is created and displayed regularly on YSU's campus.

Student and faculty art exhibitions, including two annual graduating BFA exhibitions, are held on the YSU campus. The McDonough Museum also exhibits work of nationally and internationally known artists. The Butler Institute of American Art (http://butlerart.com/), a private institution located in the midst of the YSU campus, sponsors two annual competitive exhibitions, the area annual and the national mid-year, to which students are encouraged to submit work. The Judith Rae Solomon Gallery, located on the 2nd floor of the Cliffe College of Creative Arts and Communication’s Bliss Hall, is used throughout the year for various student, faculty, and visiting artist exhibitions. The Student Project Gallery, located in the lower addition of Bliss Hall, is a space dedicated to student artwork exhibitions.

The Student Art Association (http://art.ysu.edu/student-art-association/) sponsors an annual exhibition of the work of Youngstown State University students. Each April, the work is displayed at the McDonough Museum of Art, with awards provided by various donors. Other area venues also exhibit student work, including The Oakland Center for the Arts (https://oaklandcenter.info/), Trumbull Art Gallery (https://www.trumbullartgallery.com/), and the Art Outreach Gallery at the Eastwood Mall (https://www.facebook.com/artoutreachgallery/).

For more information about how you may become involved in Art at YSU, please visit the Department of Art (http://artdept.ysu.edu/).

Music

The Dana School of Music (https://ysu.edu/academics/college-creative-arts-and-communication/dana-school-of-music/) presents numerous concerts every year, and many of the School's musical ensembles are open to all university students, including Barbershop Chorus, Basketball Pep Band, Concert Band, Dana Chorale, Gospel Choir, Jazz Bands and Compos, Marching Band, Symphoney Orchestra, Voces of YSU (University Chorus), Wind Ensemble, and many others. For information about these ensembles, other performance opportunities, and the multiple courses that are open to all students, please visit the Dana School of Music pages in the Cliffe College of Creative Arts section of this Bulletin.

Student groups in the Dana School of Music include:

- Dana Clarinet Society
- Dana Double Reed Society
- Dana Flute Society
- Dana Guitar Association
- Dana Horn Society
- Dana League of Composers
- Dana Piano Guild
- Dana Vocal Society
- Ohio Collegiate Music Educators Association
- Phi Mu Alpha Sinfonia
- Saxophone Society
- Sigma Alpha Iota
- Youngstown Percussion Collective
- YSU Jazz Society

Theatre & Dance

In addition to academic course offerings, the Department of Theatre & Dance (https://catalog.ysu.edu/undergraduate/college-programs/college-creative-arts-communication/department-theater-dance/) offers all YSU students opportunities to perform on stage, work in tech and design areas, and participate in student film productions. Auditions, workshops, and productions are regularly scheduled throughout the academic year. Department updates and information on how to get involved can be found on the department's Facebook page – YSU Department of Theatre and Dance. Production season and academic programming updates can also be found at https://ysu.edu/academics/cliffe-college-creative-arts-and-communication/theatre-majors (https://ysu.edu/academics/cliffe-college-creative-arts-and-communication/theatre-majors/). Attendance at all Department of Theatre & Dance productions is free to YSU students.

Membership in the Eta Phi chapter of Alpha Psi Omega (APO), the country’s largest and most active honorary dramatics society, is open to YSU students who distinguish themselves in both theatre and scholarship. For more information about APO, please contact the Department of Theatre & Dance.

Major University Theatre productions are presented in Bliss Hall, the performing arts complex that houses Ford Theater, a 400-seat standard proscenium theater, and the Spotlight Theater, a flexible capacity arena theater. In addition to accommodating major productions, the Spotlight Theater also serves as a laboratory for student-directed plays and various workshop and classroom activities.

With an emphasis on experiential learning, YSU Theatre & Dance students apply classroom theories and techniques in numerous campus productions. An active guest-artist program has also brought them into working contact
with noted practitioners from the professional world. Participation in The Kennedy Center American College Theatre Festival (http://www.kennedy-center.org/) and The American College Dance Association (https://www.acda.dance/) offers undergraduate research opportunities as well as access to industry professionals.

**Intercollegiate Athletics**

Intercollegiate athletics are conducted at Youngstown State University to meet the needs and interests of the entire student body as spectators or participants in healthful amateur sports. Tryouts are open to any student who qualifies under the Youngstown State University, NCAA, and conference eligibility regulations. Men’s teams compete in intercollegiate baseball, basketball, cross country, football, golf, tennis, men’s swimming and diving, and track and field. Women’s intercollegiate teams compete in basketball, bowling, cross country, golf, lacrosse, soccer, softball, swimming and diving, tennis, track and field and volleyball.

The University’s intercollegiate athletic programs are governed by the National Collegiate Athletic Association (NCAA).

Students are encouraged to participate as athletes, cheerleaders, trainers, managers or scorekeepers in any of the varsity sports. Students who want to try out should contact the head coach of the sport of interest in either Beeghly Center or Stambaugh Stadium.

See the YSU Athletics website for more information.

**Honorary Organizations**

Honorary organizations related to academic fields and departments recognize outstanding achievement by University students. Many of these organizations are local chapters of national honor societies, which provide national recognition and local scholarships.

For more information on honorary organizations in your area of academic concentration, contact the faculty department chairperson of that area, or the Student Activities Office (http://cms.ysu.edu/administrative-offices/student-activities/student-activities/student-activities/), second floor, Kilcawley Center.

- Alpha Epsilon Delta - Honorary Premedical Society
- Alpha Kappa Mu - Historically African-American Honor Society
- Alpha Lambda Delta - Freshman Honor Society
- Alpha Phi Sigma - Criminal Justice Honor Society
- Alpha Psi Omega - Drama Honor Society
- Beta Alpha Psi - Accounting and Finance
- Beta Gamma Sigma - Business
- Chi Sigma Iota - Counseling Honorary
- Eta Sigma Gamma - Health Education Honorary
- Golden Key - National Honor Society for achievement in all undergraduate fields of study
- Kappa Delta Pi - Education Honor Society
- Kappa Omicron Nu - Human Ecology
- Lambda Pi Eta - Communications Studies
- National Society of Collegiate Scholars
- Omega Chi Epsilon - Chemical Engineering
- Omicron Delta Kappa - Leadership
- Order of Omega - Greek Letter Honor Society
- Phi Alpha Theta - History Honorary
- Phi Epsilon Kappa - Physical Education
- Phi Kappa Phi - National Honor Society for achievement in all fields
- Pi Mu Epsilon - Mathematics Honorary
- Pi Sigma Alpha - Political Science
- Psi Chi - Honorary Psychology
- Sigma Alpha Lambda - National Leadership and Honors Organization
- Sigma Pi Alpha - Human Resource Management
- Sigma Theta Tau - Nursing
- Society for Collegiate Journalists
- Tau Beta Pi - Engineering Honor Society
- Theta Alpha Kappa - Religious Studies & Theology
- Upsilon Pi Epsilon - Computing & Information Disciplines
- Omega Chi Epsilon - Chemical Engineering
- Alpha Phi Sigma - Criminal Justice Honor Society
- Beta Gamma Sigma - Business
- Chi Sigma Iota - Counseling Honorary
- Eta Sigma Gamma - Health Education Honorary
- Golden Key - National Honor Society for achievement in all undergraduate fields of study
- Kappa Delta Pi - Education Honor Society
- Kappa Omicron Nu - Human Ecology
- Lambda Pi Eta - Communications Studies
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- Sigma Pi Alpha - Human Resource Management
- Sigma Theta Tau - Nursing
- Society for Collegiate Journalists
- Tau Beta Pi - Engineering Honor Society
- Theta Alpha Kappa - Religious Studies & Theology
- Upsilon Pi Epsilon - Computing & Information Disciplines

**YSU Annual Awards**

The University has established a series of awards to recognize excellence and to encourage participation in campus life. The awards are presented annually at the Student Activities Awards Banquet in the spring. Each year students, faculty, and staff are invited to nominate outstanding individuals and organizations for these prestigious awards. Selections will be made by a committee composed of students, faculty, and staff. Details regarding this program and the different awards listed below may be obtained from the Student Activities Office.

**Bernadine Marinelli Memorial Scholarship**

The Bernadine Marinelli Memorial Scholarship is awarded to an outstanding student supervisor in the Division of Student Experience in memory of an exceptional educator and student advocate. Ms. Marinelli, the first female high school principal in the Youngstown City School District, was a dynamic person who helped many students to reach their potential.

**Cardinal Newman Service Award**

The Cardinal Newman Award is given to a graduating senior who, through service to the Newman Center, Catholic Student Association, the Youngstown State University as a whole, and to the wider community, has embodied Cardinal Newman’s motto, thus allowing their own feats to be spoken to others in service and in recognition of the responsibility we each have to care for our neighbor.

**Constellation Award-Outstanding University-wide Programs**

This award recognizes an outstanding University-wide event sponsored by a registered YSU student organization. The program must be distinguished by its inclusion of the University community and the program’s contribution to the quality of student life.

**DeCrane-Houser Award**

Scholarship for a student who has been active at the Newman Center. It is in honor of Arthur DeCrane, who was the first Catholic campus minister for Youngstown College and also for the late Judge William Houser, who was active in the Newman Center while going to school here. Judge Houser’s family donated a large sum of money to make this scholarship available upon his death.

**Emerging Leader Program**

The Emerging Leader Program provides sophomore students with an opportunity to develop and refine the knowledge and skills essential to leadership. Students who complete the program receive designation on their official University transcript, cords for their academic regalia, and a YSU Leadership pin.

**Gillespie-Painter Award**

To recognize outstanding achievement in support of the Division of Student Affairs at YSU beyond the scope of assigned duties. All members of the Division of Student Affairs are eligible for this award.

**The John J. Gocala Service Award**

The John J. Gocala Service Award was established by the Student Government Association during the 2008-09 academic year to recognize the commitment and contributions of John J. Gocala during his tenure as YSU Police Chief.
The intent of the award is to recognize one individual within the university community who has gone above and continues to go above and beyond the call of duty to serve the first-class reputation and traditions of Youngstown State University.

The individual must truly work to preserve the best interests of the YSU campus and community.

**Kocinski Award**
The Kocinski Award is given in honor of Marilyn Kocinski, who taught dance at YSU in the Department of Human Performance and Exercise Science from 1960 to 1983.

Her family was responsible for instituting the award in the late 1990s in her memory. The award is presented to a senior student who has played a significant role as a student leader in the YSU Dance Ensemble and who demonstrates academic integrity as well as artistry and creativity in the field of dance.

**Libra Award-Outstanding Advisor**
The Libra Award is presented to the outstanding faculty/staff advisor of a registered student organization. The award is designed to recognize the contributions and commitment to furthering student leadership development made by advisors.

**Dr. Martin T. "Marty" Manning Award**
The Martin T. "Marty" Manning Award, established during the 2010-2011 academic year by the Student Government Association, is in honor of the late Dr. Martin T. "Marty" Manning. The award is in recognition of the superior student mentoring of Dr. Manning.

The award is given to a full- or part-time student, administrator, faculty or staff member, or alumnus/a who has exemplified the student-mentoring capacity that Dr. Manning so consistently displayed throughout his Youngstown State University career.

**Dr. Charles A. McBriarty Award**
This award was established by Student Government during the 1992-93 school year to recognize and remember the commitment and contributions to students and student services by Dr. Charles McBriarty during his tenure as Vice President for Student Affairs. Its intent is to recognize individuals within the university community who have a reputation for being exceptionally student-oriented and who possess the traits, ethics, and friendly style exhibited by Dr. McBriarty.

**Edna K. McDonald Cultural Awareness Award**
Award to recognize an outstanding individual who has made a lasting contribution to encourage and increase awareness of cultural diversity at Youngstown State University. All faculty, staff, students, and members of the extended YSU community are eligible for the award.

**The Harry M. Meshel legacy AWARD**
The Harry M. Meshel Legacy Award, established during the 2017-2018 academic year by the Student Government Association, is in honor of the late Mr. Harry M. Meshel. An influential political figure, Mr. Meshel made immense contributions to the valley that simply cannot be measured. This award is in recognition of the values of: public service, civics, education, culture, and dedication to one’s hometown, each of which he brilliantly possessed.

This award is bestowed upon a Youngstown State University student, who may or may not be a member of the Student Government Association. The individual must have displayed the qualities Mr. Meshel encompassed, specifically the commitment to public service for the Greater Youngstown Community.

**Mentor of the Year**
This award honors the faculty or staff mentor who has contributed the most during the past year to the development of a YSU student.

**Multicultural Leadership Award**
The Multicultural Leadership Award recognizes up to two minority students who have achieved academic success and demonstrated effective leadership in promoting cultural awareness to the campus and community.

**Nova Award-Outstanding New Student Organization**
Recognizes a newly registered student organization exhibiting initiative in organizational development and strong potential to contribute to the quality of life as a recognized student organization at Youngstown State University.

**Orion Award-Outstanding Student Organization**
The Orion Award recognizes an exceptional student organization for its outstanding leadership and service to the University community during the current academic year.

**President Cynthia E. Anderson Lifetime Achievement Award**
Awarded to a full-time student who has exhibited an extended commitment and dedication to serving the student body through various positions on Student Government.

**Sirius Award-Student Employee of the Year**
This award recognizes student employees who have made outstanding contributions to their employers and demonstrated skills and commitment above and beyond expectations.

**Smith-Murphy Award**
The award shall be given to one full-time faculty member each year. The recipient shall possess the qualities of Lester Smith and Gratia Murphy and display a genuine concern for the well-being and success of the students he or she teaches.

**Student Government Spirit Award**
Given by Student Government to a member of the campus or Youngstown metropolitan community who has displayed enthusiasm for the work of YSU Student Government over the past academic year.

**Student Service Award**
To recognize an outstanding individual who has demonstrated exceptional commitment to the students of YSU. All faculty, staff (excluding the Divisions of Enrollment Planning and Management, Student Experience, and Student Success), and members of the University community are eligible for this award.

**Gina Tenney Memorial Scholarship**
Gina Tenney was one of YSU's best and most dedicated students. Before her tragic death in 1985, Gina had been actively involved in campus life and had achieved excellent academic standing. She served in Student Government and was a student assistant in the Student Services Office. She was also active in the University Theater Department. In honor of Gina’s memory, the Gina Tenney Memorial Scholarship Fund was established in January of 1986 by the YSU Student Government.

**YSU Pin**
Begun 70 years ago, in 1948, the YSU pin recognizes up to five graduating seniors who have achieved academic success and demonstrated outstanding leadership, motivation, and creativity in University and community activities.
The Luke N. Zaccaro Award
The Luke Zaccaro Award is given to a YSU student who may be a member of Student Government. The individual should have done something exceptional for the university, Student Government, or fellow students during the course of the current year.

Other Awards and Prizes
YSU Leadership Scholarship
The YSU Leadership Scholarship recognizes outstanding students for their contribution to and leadership in campus activities. Each year up to seven students are awarded $600 for Fall tuition and fees.

The Greek Campus Life Awards for Scholarship
Given annually to the fraternity and sorority chapter with the highest aggregate point index and to the member of a fraternity with the highest individual point index, based on the academic work of the previous two semesters. The awards are presented during the spring semester at the annual Greek Sing competition.

Student Conduct

Student Conduct
Students at YSU have an obligation to conduct themselves in a manner that is compatible with the University's purpose as an institution of higher education. The policies and regulations in The Student Code of Conduct have been established to ensure a positive educational experience for every student. Therefore, all students should take time to familiarize themselves with The Student Code of Conduct, residence hall policies, University lease agreements, student organization policies, and other related policies to ensure they are aware of both the expectations of them and the rights afforded to them as a member of the University community.

Students believed to be in violation of The Student Code of Conduct or other University policies will be referred to the Office of Student Conduct for a conference and possible hearing. The student conduct process at YSU adheres to procedural due process and is intended to be part of the larger university educational process. Students found responsible for violations may be issued educational sanctions, fines, status changes, restriction of privileges. In cases of repeated and/or egregious violations, suspension or expulsion may occur.

In the event that a member of the University community needs to report a potential violation of The Student Code of Conduct, they may contact a staff member from Housing & Residence Life, University Courtyards, Student Experience, Student Conduct, or Youngstown State University Police Department. Additionally, theYSUPD website has a Confidential Tip Form that can be used to provide anonymity to the reporting person.

More information and the full text of The Student Code of Conduct can be found on the Student Conduct website (https://ysu.edu/student-conduct/).

Academic Support Services

Center for Student Progress

Academic Coaching Services
The Center for Student Progress (CSP) Academic Coaching Services offers professional academic coaching to assist students on a one-on-one basis with strategies for college success. An academic coach is your go-to person for college success. Coaches partner with you to help you understand the "why" and the "how" of learning. Together, you and an academic coach can figure out what's holding you back from being successful and create better study methods to move you ahead. A coach can also help you tackle common academic concerns like managing your time, reducing procrastination, setting goals, performing better on tests, easing test anxiety, and changing your mindset.

Visit Center for Student Progress Academic Coaching Services (https://www.ysu.edu/center-for-student-progress/) for more information or call (330) 941-3538.

Adult Learner Services
The Center for Student Progress Adult Learner Services assists adult students in making the transition to and graduating from college. Adult students are defined as those who are 25 years of age or older or who have been out of school four years or more. The CSP/Adult Learner Services provides academic and personal support both individually and through programming with services such as:

- Academic Coaching
- Early Alert Reporting System (EARS)
- Time management and goal setting for adults

For more information or call (330) 941-3538.

Disability Services
The Center for Student Progress Disability Services provides students, faculty, and staff with assistance and information regarding accommodations for students with disabilities, either permanent or temporary. Compliance with the Rehabilitation Act of 1973 and the Americans with Disabilities Act as amended in 2008 involves providing reasonable accommodations to qualified individuals with disabilities. These accommodations are provided in order to ensure equal access to people with disabilities regarding educational opportunities, programs, and activities.

The Center for Student Progress Disability Services addresses the needs of students with disabilities. Support for academic success includes:

- Serving as the gateway for accommodations for YSU students with disabilities
- Providing accommodation information
- Collaborating with faculty/staff regarding issues involving students with disabilities
- Arranging for classroom accommodations for students with disabilities to allow equal educational access
- Making campus referrals/connections

To inquire about receiving disability services, please contact the office at (330) 941-1372 (voice), (866) 757-1353 (video), or (330) 941-7470 (fax). A confidential appointment will be set up to discuss accommodation needs. The CSP/Disability Services is located in Kilcawley Center/2nd Floor.

Visit Center for Student Progress Disability Services (https://www.ysu.edu/center-for-student-progress/disability-services/) for additional information or call (330) 941-1372.

Strong START
Strong Start is a first year program for YSU students whose true academic promise may not be reflected in their standardized test scores or their high school GPA.

Program Features
Every student admitted into the program will have a program advisor to:

- Provide academic coaching to students their entire first year of college.
- Instruct the First Year Experience Course: Strong Start 1500
- Support guided major and career exploration

For more information about Strong Start, visit https://ysu.edu/resch-center-student-progress/start-strong-first-year-program/.
Student Tutorial Services
The Center for Student Progress Student Tutorial Services provides support for academic success by offering:

- Academic support in a variety of lower and upper division courses
- Appointments are scheduled on first come, first served basis
- Students meet weekly at the same time/day with same Peer Tutor
- Small group tutoring for high demand and historically difficult courses
- Tutors offer review sessions for exams
- Emphasis on clarifying content, providing opportunities to practice, and developing independent learning, critical thinking and problem-solving skills.

Visit Center for Student Progress Student Tutorial Services (https://www.ysu.edu/center-for-student-progress/tutorial-services/) or call (330) 941-7253.

Office of College Access and Transition
The Office of College Access and Transition focuses primarily on high school students. The College Credit Plus program offers dual enrollment to college-ready high school students. Academic Achievers and Upward Bound are intensive programs focused on students at Warren G. Harding and Youngstown City Schools, respectively.

For more information, visit the Office of College Access and Transition (https://ysu.edu/ocat/).

Mathematics Assistance Center
The Mathematics Assistance Center (MAC) is an academic support service integrated within the Department of Mathematics and Statistics. Its mission is to offer YSU students a comfortable supportive environment to facilitate the strengthening of their fundamental mathematical skills. Through collaboration with the campus community, the MAC strives to continually expand tutoring and support services to meet the needs of students and enhance their overall learning experience. This mission is accomplished through services provided such as peer tutoring and the provision of resource materials for independent study.

The MAC has various services available to currently enrolled YSU students. These include:

- Online and in person drop-in peer tutoring*
- Online and in person appointment-based peer tutoring*
- Support for online homework
- Support for ALEKS placement
- Exam review sessions
- Study areas for independent learning*
- Access to mathematical and statistical software (MATLAB, SPSS and R)
- Access to textbooks and solution manuals*
- Access to formula sheets and other course-related supplements*

The main service, peer tutoring, is provided to YSU students either currently enrolled or preparing to enroll in mathematics and statistics courses ranging from introductory statistics, quantitative reasoning, and college algebra through calculus. The other services are provided as needed and as resources permit.

The Mathematics Assistance Center operates on a walk-in* and appointment basis during its regular business hours (listed below) at its location in Room 408 of the Lincoln Building. The staff of the MAC consists of a coordinator, graduate teaching assistants, undergraduate tutors, student office assistants, and other student personnel.

For additional information, contact the Mathematics Assistance Center at (330) 941-3274. Hours for fall and spring semesters are as follows: Monday through Thursday, 9:00 a.m. to 6:00 p.m., and Friday, 9:00 a.m. to 3:00 p.m. For assistance during summer terms, call the MAC to inquire about its hours of operation. For more information, visit the Mathematics Assistance Center (http://cms.ysu.edu/mathematics-assistance-center/math-assistance-center/) website.

*Access to these services may be limited or suspended in response to health and safety concerns.

The Writing Center
The YSU Writing Center is operated by the Department of English to provide individualized instruction in writing for all students. The goal of the Center is to help clients become more independent, confident, and successful writers. The Writing Center staff includes faculty, graduate assistants or interns, undergraduates, and a full-time coordinator.

Services include one-to-one feedback on any writing task, at any stage, for any course, as well as peer-group reviews, workshops, and access to instructional handouts. The services offered by the YSU Writing Center are free of charge to all registered YSU students.

The Writing Center is located on the lower level of Maag Library, Room 171. Writing Center hours are Monday through Thursday 9 a.m. – 5 p.m., and Friday 10 a.m. – 1 p.m. Students can schedule appointments through WCOnline (https://ysu.mywconline.com/). Evening, weekend, and satellite hours vary by semester.

For more information about the Writing Center, please call (330) 941-3055, visit the Writing Center (https://ysu.edu/writing-center/) website or e-mail wcenter@ysu.edu. Online appointments may be synchronous or asynchronous. For the latter, students need to upload a document in order to receive feedback within two business days of the scheduled appointment time.

Reading and Study Skills
The Reading and Study Skills course instruction focuses on improving reading rate and comprehension as well as enhancing strategies for studying at the college level. Staffed by instructors and undergraduate peer tutors, courses include RSS 1510A Advanced College Success Skills, RSS 1510B Basic College Success Skills and RSS 1510C STEM Advanced College Success Skills and students may be mandated to take those classes based on the COMPASS® Reading Test (CRT).

For more information about the Reading and Study Skills courses, please contact the Department of Teacher Education at (330)941-3251.

Maag Library
The William F. Maag, Jr. Library supports learning at YSU by providing facilities, resources, and instruction to meet faculty and student needs. The six-story building is at the heart of campus and provides a welcoming environment for those who need research materials, research help, or just a comfortable space to study. Study spaces throughout the library offer diverse seating options, mobile white boards, and power towers for charging mobile devices. Individual study rooms can be checked out and the 4th floor houses two group study rooms with interactive media. Floors 3 & 4 of the library are for group study and floors 5 & 6 are for silent study. A family study room is available where student parents can study while being able to supervise their children.

Maag Library is a member of OhioLINK, a group of 120 Ohio college and university libraries who collaborate to provide access to print and electronic resources essential to student academic success. Over 46 million items are available for request through OhioLINK. The library provides onsite access to over 750,000 items, including books, journals, music scores, maps, microforms, CDs, DVDs, etc. Items can be located through MaagNET, the library’s online catalog. Materials may also be requested from other OhioLINK institutions to be sent to Maag for checkout. The library also provides many textbooks, which are available for 3-hour checkout. Over 200 research databases are available to YSU students, faculty, and staff. Database access is provided...
through the library website (http://www.maag.ysu.edu/), and when off campus, users must authenticate with their name and YSU ID number. The research databases cover a wide variety of disciplines and provide access to scholarly, trade, newspaper, and popular sources of information.

The Reference Room on the main floor provides computer, printing, and scanning access as well as research help. Librarians are available for in-depth research help or questions can be asked through the Ask A Librarian email service. Librarians teach library instruction classes in their respective subject areas to help students and faculty learn how to conduct research and navigate the research databases.

The 3rd floor contains the Maag Cafe and a group study area that provides an open and collaborative learning space with computer access, a smart TV viewing area, listening stations, podcast booths, and a Verb table that supports technology integration from laptops to a monitor. The 3rd floor is also home to the Microforms Center where microfilm and microfiche can be viewed, printed, and digitally saved.

Archives & Special Collections is located on the 5th floor and serves as the official repository for the historical records of YSU and also as an archival repository for historical materials relating to the history of Youngstown and the Mahoning Valley. The Melnick Medical Museum collects, preserves, and interprets the history of medicine, especially as it relates to Youngstown and the Mahoning Valley.

Government documents are located on the 6th floor. Maag is a Federal Depository Library and regularly receives new government publications, including books, maps, pamphlets, CD/DVDs, etc. Most government publications are online and available through MaagNET and the OhioLINK Library Catalog.

The Wilcox Curriculum Resource Center (CRC) is a division of Maag Library located on the main floor of Beeghly Hall. The CRC contains collections of various formats in the fields of education, special education, school psychology, and counseling. The CRC provides access to many types of materials, including children’s literature, games & kits, K-12 textbooks, leveled readers, media, puppets, and more.

Other services separate from the library but housed within the building include the IT Service Desk (4th floor) and the Writing Center, Testing Center and English Language Institute, which are all located on the lower level.

Information Technology Services

YSU’s Information Technology Services (ITS) mission is to enable students, faculty and staff to create a technology-integrated approach to education, scholarship and service. The ITS Division includes five departments: Customer Services, Application Services, Infrastructure Services, Security Services and a Project Management Office.

The ITS Service Desk is the primary point of contact for technology customer support needs and is located on the fourth floor of Maag Library. Support is provided by phone, in person and through the IT Services portal. The Service Desk provides first-level technical support of all the YSU computer systems, telephones, classroom multimedia equipment, and assists with password-related problems, helps with installing ‘academic-related’ software, and configuring devices to connect to the YSU wired and wireless networks. More information is available at the Service Desk (https://ysu.edu/it-service-desk/) website.

Overall, ITS provides:

- Administrative and student systems including registration and finance
- Student Mobility Support through the Penguin Plug-in stations (Kilcawley and Moser Bridge
- Desktop technology support in labs and offices
- Classroom technology support
- Wired and wireless networking and security services
- System configuration and support
- Software application support
- Web page support and development
- Help desk support
- Remote support
- Technical support
- Record storage

Academic technology support with a focus on multimedia classrooms

More than 5,000 online technology devices, including personal computers, printers, and multimedia systems are located on campus. Personal computers are available on campus for instruction and research. Currently, multiple Computer Labs exist within each of the academic and campus recreational buildings on campus. Selected classrooms are equipped to facilitate broadcast quality, full-motion video distribution, and distance-learning opportunities. The YSU Network provides faculty, staff, and students the opportunity to access networks and current-generation computer hardware and software via a high-speed state-of-the-art network infrastructure. A Virtual Private Network (VPN) is provided for secure remote access to campus. A campus-wide wireless network provides mobility for students and employees. AT&T Wi-Fi services are also available for visitors.

Detailed information on technology support and services is provided on the ITS (https://ysu.edu/information-technology-services/) website.

Laboratories

In addition to the Computer Center, Youngstown State University offers a wide range of up-to-date laboratories and equipment across campus.

Located in DeBartolo Hall, the Language Learning Resource Center is designed for individual study in second-language acquisition and the study of foreign languages, literatures, and cultures. Six audio lab carrels in room 558 are equipped with Sanako hardware and software for language learning. Students may also bring their own devices and access numerous charging stations, desks with whiteboards, and color printing. The LLRC also oversees room 561, one of the Aneal Mohan Kohli classrooms of the future, which has an additional 30 student Dell personal computers and is an open lab when not in use for a class. Student assistants are hired to assist with the equipment and to tutor the languages taught at YSU.

Operated by the Department of English and World Languages, the LLRC provides free individualized instruction in world languages and support for English linguistics courses for all registered YSU students. The LLRC hours are Monday through Thursday 8 a.m. - 8 p.m. and Friday 8 a.m. - 3 p.m. Students can schedule appointments through WCONline (https://ysu.edu/writing-center/schedule-wc-appointment/). For more information about the LLRC, please call (330) 941-3465 or e-mail ysullrc558@gmail.com. Face-to-face and online synchronous appointments are available with peer tutors.

In the psychology laboratories, located in the basement of DeBartolo Hall, students can learn basic techniques of experimental psychology, child psychology, social psychology, and survey research. Equipment includes an electromagnetically isolated room, animal housing areas, a child observation room, equipment for the control of animal behavior, and various physiological recording devices.

The anthropology and archaeology laboratory has a wide range of specialized equipment including:

- standards for the parameters of a biological profile (age, sex, ancestry and stature)
- statistical analysis packages for biological anthropology research
- anthropometry instruments
- archaeology research tools

The Department of English has eight computer labs in DeBartolo Hall primarily for the use of students enrolled in English composition and professional and
technical writing classes, one lab for journalism classes in Fedor Hall, and one lab for composition classes and Writing Center use in Maag Library.

Computer facilities in the new Williamson Hall include three networked computer labs, a Financial Service Lab, and Professional Sales Lab. Specialized software used in business courses is also available.

In Cushwa Hall, laboratories are provided for radio broadcasting, physical therapy, dental hygiene, microbiology, nursing, criminal justice, respiratory care, human ecology, medical laboratory technology and science, clothing and textiles, medical assisting, emergency medical services, and polysomnography.

Laboratories in Moser Hall are described in the College of Science, Technology, Engineering, and Mathematics section of the catalog.

For more information, visit the Campus Computer Labs.

Comprehensive Testing Center
The Comprehensive Testing Center is a part of the Division of Student Success. Among the testing services provided are administrations of national admission and certification examination. These include:

- American College Test (ACT)
- Graduate Record Exam (GRE) Subject Test
- Miller Analogies Test (MAT)
- Law School Admissions Test (LSAT)
- PRAXIS exam
- SAT

Additionally, YSU’s placement testing is administered through this office. Placement tests are administered year-round in both group and individual sessions.

For more information visit the Testing Center (http://cms.ysu.edu/administrative-offices/testing-center/testing-center/) website.

International Programs
The International Programs (http://cms.ysu.edu/administrative-offices/center-international-studies-and-programs/cisp-home/) Office is an integral part of the Division of Academic Affairs and is responsible for coordinating the international dimensions of the university, including international student and faculty services, study abroad and exchange programs, and the English Language Institute. For more information on studying abroad and about the English Language Institute (http://cms.ysu.edu/administrative-offices/english-language-institute/eli-home/), visit the website.

International Student and Faculty Services
The International Programs Office (IPO) coordinates international student recruitment and admission, the international student health insurance program, and the Stephen and Brigitta Hanzeley International Student Scholarship. The IPO also provides immigration-related services for international students, faculty, and staff. IPO houses the English Language Institute, the International Pathway Program, as well as the Summer in America Program. IPO also manages the International Memoranda of Understanding agreements for departments across the University. For more information about requirements for enrolled international students, see “Requirements for Nonimmigrant Students” (located under the Credit Hours/Class Standing/Majors section of the catalog).

International Student Association (ISO)
Originally founded in 1958 as the International Student Federation, the purpose of ISA is:

- To promote positive interactions among U.S. American and International students;
- To increase awareness of international cultures at Youngstown State University and in the Youngstown community.

Interactions are promoted through campus and citywide activities and events.

Campus Safety
University Police Department
Youngstown State University maintains a well-trained and well-equipped campus police department. The department is located in Clingan Waddell Hall at the corner of Fifth Avenue and Wood Street.

The staff consists of 20 sworn full time police officers, 69 intermittent sworn police officers, and five civilian support staff. All sworn police officers are trained and certified by the Ohio Peace Officer Training Academy and have full police powers. The department is a community-service, technology-efficient law enforcement agency. The staff is supported by a sophisticated communication system, closed circuit television, well-equipped police vehicles, and a computer-based record-keeping system.

The training of the departmental personnel is ongoing, and crime prevention is a departmental priority. During the academic year, various University organizations sponsor educational programs that feature YSU police officers speaking to students and employees about personal safety, awareness, security, rape/acquaintance rape, sexual-assault and prevention, as well as the prevention of burglary and vandalism.

The Youngstown State University Police Department has mutual aid agreements with the Youngstown City Police Department, the Mahoning County Sheriff’s Department, and a majority of other police Departments in Mahoning County and with other state universities in Ohio. The agreements provide for the Youngstown State University Police Department to exercise the same law enforcement authority when engaged in law enforcement functions as their partners in the various mutual aid agreements, in order to provide a safe and secure environment for the Youngstown State University Community. Certain officers from the department are also members of the Mahoning Valley Law Enforcement Task Force as well as the Mahoning County OVI Task Force. These task forces make available additional resources to the YSU Police Department.

The University Police Department is open 24 hours a day. The general business telephone number is (330) 941-3527. The emergency service number is extension 911 dialed through any campus extension. Campus emergency telephones are located throughout campus that will connect you directly to the YSU Police Department in the event of an emergency. 911 calls made from cell phones are answered by the City of Youngstown Communications Center. If a 911 call is made on a cell phone, it is important for the person to tell the call taker they are calling from the YSU Campus. All students are encouraged to program the YSU Police Department phone number (330) 941-3527 into their cell phones for immediate contact with a YSU Police Dispatcher when a campus phone is not available or convenient.

Campus Safety Statistics
Youngstown State University has an outstanding record of safety on campus. For a detailed description of campus safety measures and FBI Uniform Crime Report statistics, see the publication Annual Campus Safety and Fire Report available on YSU Police website or by searching “YSU Annual Campus Safety and Fire Report” on any search engine. Statistics collected by the department on crimes occurring on or near campus are submitted to the U.S. Department of Education annually in compliance with the The Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act.
Parking Services

Emergency Notification System
The University has in place an emergency notification system that instantly reaches cell phones and other mobile devices when an urgent campus situation needs to be communicated. In the event of an emergency, a text message is sent to the mobile number and/or email registered with the system. Students must register at the Penguin Alert System website to receive emergency notifications. Students may also register parents' cell phone numbers at the same website to receive alerts.

Student Security Service (SSS)
SSS is a free service provided by specially trained YSU student employees who will accompany students, faculty, and staff safely anywhere on campus. During the hours of operation, you can be escorted to the near North Side if an officer is also available to assist with the escort. Student Security Service aides are available Monday through Thursday from 7:00 a.m. to 11:00 p.m., and on Friday from 7:00 a.m. to 8:00 p.m., every day school is in session. The exception is summer semester and during breaks, when escorts are available from 7:00 am to 6:00 p.m. Monday through Friday. Those with disabilities who need assistance are encouraged to make special arrangements to be safely escorted to any location on campus, day or night. Call (330) 941-1515 for more information or to schedule an escort. After hours or on holidays and weekends, call the YSU Police Department at (330) 941-3527 if you need assistance.

Parking Services
The parking system for students is divided into two categories, transportation fee and penguin promise.

YSU students who arrived on campus prior to summer of 2018 are in the transportation fee category. These students if enrolled in 6+ credit hours will be assessed a $115 transportation fee which included a parking permit. Students in the transportation fee category who are registered for less than 6 hours may opt in to the fee by purchasing a permit at $115. All students must log into the current semester in the YSU portal and follow the link to parking services in order to obtain a permit.

YSU students who arrived on campus for summer 2018 or after are in the penguin promise category. Penguin promise students may purchase a parking permit through the YSU portal. Commuter permits, valid 7AM – 11PM daily are $45. Overnight permits, valid 24 hours a day in overnight parking lots are $90. All students must log into the current semester in the YSU portal and follow the link to parking services in order to obtain a permit.

Parking permits are required at all times in all lots and spaces on the YSU campus.

Parking areas are designated as follows:
M-Mixed Parking (faculty, staff, and students)
R-Resident Parking
F-Faculty/Staff Parking
S-Student Parking

Parking facilities for students include two parking decks and surface lots. Although some lots are designated for faculty/staff parking during the day, after 5 p.m. daily, most F-lots become mixed (except the F-1 lot on University Plaza).

Disability Parking
All students who wish to utilize YSU handicap parking must bring their valid state handicap registration to Parking Services in order to receive a handicap sticker. Once the sticker is applied to your permit, you may utilize all handicap parking on campus.

If a handicap permit registered to someone other than the YSU parking permit holder is used in conjunction with the YSU parking permit, it is invalid for parking in handicap spaces on campus.

Alumni and Events
The Office of Alumni and Events Mission
The Office of Alumni and Events emphasizes a creative, integrated approach to communicating with, and fostering and maintaining relationships with all alumni, students, faculty and staff, and community members. This approach is accomplished through promoting and strengthening relationships with all, while upholding academic traditions and university vision. Alumni and Events provides comprehensive programs which promote involvement in and support of the university. University, regional and national events managed by the office are designed to highlight the value of the university.

The Office of Alumni and Events creates, coordinates, and/or assists with university events on campus and in the community. Alumni and Events fashions and implements a standard “University Look” to carry across all events to uphold the exacting standards of YSU and to ensure all events exhibit the same level of quality that envisions YSU’s dedication to tradition and excellence.

Alumni and Events is charged with planning and implementing major university events including commencement. The office is also assigned unique one-time events such as political and dignitary visits, presidential installations, groundbreaking ceremonies and news conferences. Alumni and Events is charged with executing academic ceremonies that welcome the students to the university, celebrate their accomplishments and scholarship, and honor the culmination of their academic endeavors. These ceremonies build pride in students and alumni members in the education they earned from YSU.

A remaining aspect of the Office of Alumni and Events is assisting and/or partnering with campus colleges, departments, and programs with their events when requested. Under this realm, Alumni Events institutes the University Look and helps with event planning, logistics, and day of support when needed.

Campus Facilities
Campus Development
During its earlier years, Youngstown State University had a number of homes. Starting in the old Central YMCA building, it occupied various sites on Wick Avenue until the completion of Jones Hall in 1931. Additional buildings have
been constructed and nearby properties converted to University use so that today the campus extends through most of an area five blocks long and four blocks wide, covering almost 150 acres. The University also owns 118.4 acres in Hartford Township.

**Stambaugh Stadium**
The long-time home of the YSU Football program, the Arnold D. Stambaugh Stadium complex is one of the top FCS facilities in the country. The Penguins play all their home games on Beede Field, which features a state-of-the-art artificial-turf surface. The Stadium itself has a seating capacity of 20,630 and has a loge complex that houses 26 individual suites. The building is the location of the Jermaine Hopkins Academic Center, the Athletics Strength and Conditioning Complex, Athletic Training Room, Athletic Ticket Office, ROTC, a travel agency, racquetball courts, three full-length basketball courts, and numerous athletics offices. The locker rooms for the softball, soccer, baseball, and football programs are also housed in the building.

Atop the stadium and overlooking the city of Youngstown is the DeBartolo Stadium Club. The club provides meeting and dinner/party seating for more than 200 guests and is available to campus and community organizations or individuals. For reservation information, please contact the Athletic Department at (330) 941-2385.

**Don Constantini Multimedia Center**
The Don Constantini Multimedia Center, which was completed in Fall 2019, sits atop the east side stands of Stambaugh Stadium. The new facility houses a “Classroom of the Future” for the Department of Communications and hosts game day media activities for all Stambaugh Stadium events.

**Beeghly Physical Education Center**
The longest-standing on-campus athletics facility is the Beeghly Physical Education Center. The facility, which was first used in 1972, is home to the basketball, volleyball, and swimming and diving programs. The Department of Kinesiology and Sport Science, the basketball programs offices, and many YSU athletic teams are located in the building. The Beeghly Center court is named after longtime basketball coach Dom Rosselli. The arena has a seating capacity of more than 6,000 and serves as the home court for the volleyball and basketball teams. The natatorium features five diving platforms and an impressive swimming pool. Also in the new-look building is the Coaches Court, a room used by the YSU Penguin Club. Additionally, Beeghly Center houses faculty offices, four classrooms, laboratories for research and kinesiology, physical education for handicapped, a dance studio, a rifle range, and a fitness center.

**YSU Softball Complex**
The Youngstown State Softball Complex opened in the spring of 2014 and provides a full-time on-campus home for the Penguins. The facility is located on the west side of campus west of Stambaugh Stadium and just south of Farmers National Bank Field. The lighted complex has access to concessions and restrooms and has seating for more than 500 spectators.

**WATTS**
The Watson and Tressel Training Site opened in the fall of 2011. One of the more eye-popping buildings on campus, the WATTS is an indoor athletic facility containing a 300-meter competition track, a full-length football field, batting cages, a putting green, protective netting, and locker room facilities for the golf and track and field teams. Built at a cost of nearly $14 million, this facility allows for year-round training for all athletic programs, as well as a competition site for the track and field teams. Students are permitted in the facility at most times, the WATTS is open for public use in the evening during the winter.

**Farmers National Bank Field**
YSU’s soccer and track and field programs call the Farmers National Bank Field home, located on the west end of campus across from Stambaugh Stadium. The full-length soccer field and eight-lane 400-meter NCAA regulated track is one of the best in the region. The facility opened in the fall of 2013 and is utilized by the campus recreation department for intramurals throughout the year.

**Andrews Student Recreation and Wellness Center**
The Department of Campus Recreation is located in the Andrews Student Recreation and Wellness Center. This state-of-the-art facility contains more than 140 pieces of strength and conditioning equipment. Located near the free-weight and cardio area is the Center’s impressive rock wall, at 53 feet Ohio’s tallest. Volleyball, basketball, and other activities are situated within the multi-purpose sports forum, which contains four courts. The spacious aerobic studios are home to many group exercise classes and are adjacent to the 1/8-mile indoor track, both on the top floor of the facility.

The Andrews Center also includes a tranquil meditation studio, full-functioning locker rooms, and the Wellness Resource Center. In addition to the Andrews Student Recreation and Wellness Center, the Department supervises programs in Beeghly Physical Education Center, Stambaugh Stadium, and the outdoor complex.

Participants must have a valid YSU ID card to use the facilities, equipment, services, and programs offered by the Department of Campus Recreation.

For additional information about the Department of Campus Recreation, please contact (330) 941-3488 or visit Campus Recreation (http://cms.ysu.edu/administrative-offices/campus-recreation-and-wellness/campus-recreation/) website. Submit a cover letter and resume to the Department of Campus Recreation administration office, located in the Andrews Student Recreation and Wellness Center.

The Department of Campus Recreation provides creative and innovative, instructed or self-led wellness, and recreational programming to meet the diverse needs of our students and the YSU community.

THE DEPARTMENT IS COMMITTED TO:
- Promoting a holistic approach to wellness, and developing healthier lifestyle choices that lead to personal and professional growth.
- Providing state of the art services and facilities.
- Integrating diverse learning, leadership opportunities and wellness perspectives with social, economic and global ideas from the Youngstown State community that compliments the academic mission of Youngstown State University.

STUDENT LEARNING OUTCOMES
- Student will be able to practice a holistic approach to wellness and developing healthier lifestyle choices that lead to personal and professional growth.
- Students will learn short and long term benefits of having facilities and equipment that are cutting-edge, universally designed, and well maintained.
Through diverse learning, wellness perspectives, and leadership opportunities, students will demonstrate civic, social, and cultural awareness and direction for betterment of the University, city, region, and world.

For more information please visit: www.ysu.edu/campus-recreation

**Cafaro Family Field**

The new Cafaro Family Field on the north side of campus lies along Elm Street adjacent to the Cafaro House residence hall and is funded, in part, through a gift from the Cafaro family. The facility includes lighting, seating and restrooms, and is used for a variety of student recreational activities including soccer, lacrosse, rugby, Ultimate Frisbee and intramurals throughout the year.

**Indoor Tennis Center**

Construction was completed in March 2020 the indoor tennis center on the west side of campus, across Fifth Avenue. The new facility is houses six tennis courts, restrooms and locker rooms.

**Off-Campus Athletics Facilities**

While Youngstown State has some impressive on-campus facilities, programs still utilize areas off campus for events and competition. The baseball program plays all home games at Eastwood Field in Niles. Eastwood Field, a 6,000-plus seat stadium, is home to the Cleveland Indians’ short-season Class A affiliate. The golf programs call Mill Creek Park’s course its official home, but practice at various courses throughout the area.

**Beeghly Hall**

The four-story, 96,600-square-foot Beeghly Hall opened in the fall of 1998 to serve as the College of Education building.

On the main floor are the main north/south entrance and access, dean’s suite, Wilcox Curriculum Resource Center, Child Study Center, and the 400-seat multi-purpose and multi-media McKay Auditorium.

The Beeghly College of Education building houses:

- Teacher Education
- Counseling School Psychology, & Educational Leadership
- Center for Human Service Development
- Transition Opportunities in Post-Secondary Settings (TOPS)
- Project Pass
- Community Counseling Clinic

**Bliss Hall**

Housing the Cliffe College of Creative Arts and Communication, Bliss Hall, which was completed in 1977, was named in memory of William E. Bliss, a prominent area industrialist. Its facilities include:

- Judith Rae Solomon Gallery
- Student work space/art gallery
- Conference and seminar rooms

**Department of Art**

- Photography computer lab with large format printers
- Photography studio lab with black and white enlargers
- Printmaking studio with large format lithography, etching/relief, and screen printing presses
- Fully equipped drawing, printmaking, sculpture and painting studios
- Art Education studio lab with SMART board technology
- 20 station Mac-based digital media computer labs (2) with 3d printers
- 20 station Mac-based graphic design computer labs (2)
- Ceramics studios with gas, electric, raku, and salt kilns, throwing wheels, and hand building stations
- Woodworking studio lab with large stationary equipment
- Dedicated workspace with large 48-inch laser cutter
- Metals fabrication lab with welding and metal working equipment
- Casting foundry with induction furnaces for ferrous and non-ferrous metals and 2-ton overhead bridge crane
- Exterior 3000 square foot work area with one-ton jib crane
- Approximately 21,000 square feet of professional and student experimental gallery spaces
- Individual graduate student studio spaces
- 16 art faculty offices

**Department of Communication**

- Full HD television studio
- 800 sq-foot production floor
- State-of-the-art LED light grid with ETC ColorSource lighting console
- 4 JVC HD studio cam (2 on Vinten Osprey Elite pedestals, 1 on jib, 1 handheld)
- Control room with NewTek 860 Tricaster, Allen & Heath QU-32 Digital audio console and LiveTex graphics work station
- Video editing suite (5 bays)
- Full Adobe Creative Cloud Suite with Premier
- 3 sound-proof editing booths
- Mobile Media Units
- 8 channel Mackie mixers
- Broadcast headsets
- H6 Zoom recorders
- Full Audio Theatre Production System
  - 16 channel Mackie mixer
  - Rode cardioid condenser microphones
  - Shure SM58 microphones

**Dana School of Music**

- 248-seat Bliss Recital Hall with a Schlicker performance organ
- 80 acoustically controlled music practice rooms equipped with Steinway studio or grand pianos
- Two organ practice rooms with Flentrop practice organs
- 30 faculty office-studios that may be utilized for music instruction
- Multiple music ensemble rehearsal facilities
- Dana Recording Studio features a
  - .12 core Intel Mac tower running Avid Pro-Tools 11, MOTU Digital Performer 7.24, and Apple Logic DAWs software
  - Universal Audio Apollo interfaces and a Tascam DM4800 fully automated mix surface
  - Outboard Kurzweil and Roland keyboards, controllers, and synths
  - Reason 7 and the Native Instruments Komplete 10 software package
  - Shure Large Diaphragm Condenser mics, Audio Technica SDC mics, Shure Beta 58s and 57s, and a matched pair of Cascade Fathead II ribbon microphones
  - Genelec 1031 monitoring system with 7050b Sub

**Department of Theatre & Dance**

- Ford Theatre, 400 seat proscenium stage
- Spotlight Arena Theatre, an experimental theatre with flexible seating for up to 250
- Costumer design studio
- Scenic design and construction studio equipped with advanced scenic technology
- Lab theatre/rehearsal studio
while recognizing, identifying, and preserving their heritage.

maintaining the visual, architectural and physical character of these structures are in the Wick Avenue Historical District. Renovation efforts were dedicated to representing important eras in Youngstown's development, these two buildings listed in the National Register of Historic Places in recognition of their

Day Care Center and the Rich Center for Autism.

major renovation should be completed by Fall of 2020, which houses Wee Care and purchased from the Youngstown Board of Education in September 1965. A

Fedor Hall is located on the west side of Elm Street. It was constructed in 1949 and originally the home of the Myron Israel Arms Family. It is located on the corner of Wick Avenue and University Plaza.

One of the oldest buildings on the present campus is Howard W. Jones Hall, a limestone structure of conventional Tudor style on the northwest corner of Wick and Lincoln avenues. Built in 1931 and long the institution's "main building" it was renamed in 1967 to honor the man whose energy and acumen, during his 36 years as president, brought an embryonic college to membership in the state university system.

The structure was enlarged in 1949 by the addition of the C.J. Strouss Memorial Auditorium, named for the then president of the Strouss-Hirshberg Company, a friend and trustee of the University. In 1978 the interior was completely remodeled to accommodate administrative offices. Jones Hall currently houses the Division of Student Success, Payroll, Controller's Office, International Programs, Multicultural Affairs, Upward Bound/Scope/Academic Achievers, Procurement Services. Accounts Payable/Purchasing, Associate Provost Student Success, and division of Academic Affairs.

Since its opening in April 1974, Kilcawley Center has served as the heart of campus. It is not only located to its central location on campus, but also to the many services, conveniences, programs, and amenities it provides to the University community. The Center's casual atmosphere, comfortable lounges, and attractive dining areas focus on making free-time activity an integral part of a YSU education. Through cultural, social, and recreational programming, Kilcawley Center provides for rich and diverse experiences for YSU students. #VisitKilcawleyCenter for details on services, hours of operation, staff directory, the daily calendar of events, and student job postings.

Kilcawley Center's study lounges are renowned for their comfortable chairs and couches that are perfect for studying, relaxing, or napping. The lounges and restaurant dining areas in #KilcawleyCenter provide high-speed wireless Internet access. The Center offers convenient ATM banking, copy services at Printing Services @ Kilcawley Center, as well as offices for Student Government, Student Media, and Rookery Radio. #KilcawleyCenter houses sixteen seminar rooms and a large multi-purpose room. On a daily basis, these rooms host luncheons, workshops, seminars, lectures, organization meetings, and programs.

Printing Services @ Kilcawley Center#located on the lower level of the center.

Graphic Services, located on the lower level of the Center, designs flyers, banners, posters, brochures, and graphics for student organizations and student projects.

Kilcawley Center offers diverse choices in dining. Located on the lower level of #Kilcawley#are:

YSU Wendy's with all your favorites

Jamba Juice (smoothies, juices, and steel cut oatmeal)

KC Food Court - which includes Denny's "The Den" (bold breakfasts, grilled burgers, hot sandwiches, and fresh salads)

Chop'd #& Wrap'd (made-to-order salads and wraps)
2. Mato (classic Italian favorites including specialty pizzas)

Dunkin' Donuts

The Melt Lab (Brings the delicious, comforting flavors of the perfect sandwich – grilled cheese!)

Hissho Sushi (Freshly prepared sushi daily on-site is the way we roll. Everyday our chefs prepare delicious sushi that will keep you happy and healthy.)

Located on the upper level is Kilcawley Center’s popular Chick-fil-A Restaurant offering delicious chicken that is 100% breast meat, no fillers or additives, and is hand-breaded in our kitchens.

The Division of Student Experience issues a photo identification card to every student enrolled at the University. The student must carry the card while on campus. The use of this card is restricted to the student to whom it was issued. Lost or stolen cards must be replaced at the student’s expense (see “Student Fees and Charges” for amount). To replace the card, the student must present proper identification (e.g. driver’s license) in Kilcawley Center at the Penguin Xing and pay the applicable replacement fee. The photo identification card is the property of the University and must be surrendered by the student upon request by University officials.

Lincoln Building

The Lincoln Building houses the Department of Mathematics and Statistics, the Math Assistance Center, and the offices of distance education and the Office of College Access & Transition, as well as 14 classrooms and 3 laboratories, and 82 faculty and staff offices.

Maag Library

The University’s six-story William F. Maag, Jr., Library, completed in 1976, provides an attractive and comfortable environment for study and research. A member of the Online Computer Library Center (OCLC), Maag Library provides reference and inter-library loan services, CD-ROM as well as online database searching, access to government documents, and other services necessary to the needs of the University community. The University Archives are housed on the fifth floor, and the Tech Desk is located on the fourth floor. The lower level of Maag houses the Writing Center, Testing and the English Language Institute.

Melnick Hall

Located on Wick Avenue, the YSU Foundation, WYSU-FM, and the Office of Research, External Affairs, Government Relations and Economic Development are housed in Melnick.

Meshel Hall

Meshel Hall, dedicated January 1986, houses expanded facilities for academic and administrative computer use that broaden Youngstown State University’s educational programs. The state-of-the-art center is for instruction, research and application in advanced computer technology that serves the entire University community.

Pete’s & More is a popular place for quick snacks and beverages, along with U.S. postage stamps and single-dose healthcare items. Visit Pete’s Treats & More to choose delicious chocolates and candy favorites in glass candy jars.

The Office for Student Experience is located on the east wing of Meshel Hall, beneath the red awning that says, “University Housing.” This suite of offices includes the office of Student Conduct, the Office of Financial Aid and Scholarships, the Office of the Registrar, the Office of College Access & Transition, as well as 14 classrooms and 3 laboratories, and 82 faculty and staff offices.

Penguin Xing serves as the information center and lost & found for the University, registers students for campus locker rentals, retails commuters, faculty and staff meal plans, and takes photos for all faculty, staff and student ID Cards on campus. The Penguin Xing is located on the upper level of the Center near the main lobby.

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The four-story steel, concrete and glass structure contains 90,100 square feet of space and is located to the west of the Wick Avenue Parking Deck with its main access and entry by the Stavich Family Bridge over Wick Avenue. The building contains 5 classrooms, 13 specialized computerized laboratories, and 89 faculty & staff offices. The Office of University Bursars, the Office of Financial Aid and Scholarships, the Office of the Registrar, the Engage Service Center, and the Office of Records are located on the second floor.

The first floor of Meshel Hall was recently renovated to include a digital speech capture lab, team innovation lab, media production labs, public speech tutoring center, and a state-of-the-art, 50-Seat multimedia communication classroom.

The Department of Computer and Information Systems is located on the third floor. The majority of the fourth floor houses the University’s main computer facilities and Computer Center staff.

John J. McDonough Museum of Art

The McDonough Museum of Art, founded in 1991, is the University Art Museum for YSU and the Valley’s premier Center for Contemporary Art. Housed in a twenty thousand square foot facility designed by internationally known architects Gwathmey Siegel & Associates, the Museum stands as a testament to High Modernist design. The Museum features changing exhibitions, installations, performances and lectures by regional, national and international artists, and also functions as public outreach for the Cliffe College of Creative Arts and Communication and the Department of Art, exhibiting work by students, faculty and alumni. In addition, the Museum offers

Campus Facilities

Chartwells provides a full catering menu for small group functions to large dinner buffets. Once you have secured a room reservation in Kilcawley Center, or a site location on or off campus, Chartwells catering director will help you coordinate every detail to ensure your event is a success — whether you are planning a quick box lunch or an elaborate buffet. Contact the Chartwell Catering Department at (330) 941-1979, visit DineOnCampus.com, or visit the office located on the lower level of Kilcawley Center.

The Office for Student Experience is located on the east wing of Kilcawley Center under Kilcawley House, beneath the red awning that says, "University Housing." This suite of offices includes the office of Housing and Resident Life, the office of the Vice President for student affairs, and the office of Student Conduct. The upper level of Kilcawley Center includes Kilcawley Staff Offices, Career and Academic Advising, Disability Services, Student Counseling Services, and Student Outreach and Support. Student Activities, Student Government, and student organizations' mailboxes are in the west end of Kilcawley, as is the Center for Student Progress. The Cove is an extension of Kilcawley Center located on the upper level on the west end of the building. The Cove is where students are welcome to lounge, study, eat, and participate in recreational games and activities. Other services in the Cove include our Giant Eagle Penguin Pickup Service and Hissho Sushi. For more information and hours of operation visit The Cove. The Andrews Student Recreation and Wellness Center can also be accessed from the upper level of Kilcawley Center.

Penguin Xing serves as the information center and lost & found for the University, registers students for campus locker rentals, retails commuters, faculty and staff meal plans, and takes photos for all faculty, staff and student ID Cards on campus. The Penguin Xing is located on the upper level of the Center near the main lobby.

Photo Identification Card

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free lectures, performances and programs organized in collaboration with varying departments on campus and the community at large.

**Moser Hall**
Moser Hall, a five-level structure completed in 1967, houses the College of Science, Technology, Engineering, and Mathematics. In addition to 71 research and scheduled laboratories, 8 classrooms, 2 research and development rooms, 7 conference rooms, and 76 offices, it contains the 200-seat state-of-the-art Schwebel Auditorium. A $6,873,000 renovation project was completed in fall 1996. Moser Hall also houses the Clarence R. Smith Mineral Museum.

**Phelps Building**
The Phelps Building, located on the corner of Lincoln Avenue and Phelps Street on campus, houses the Department of Geography, and Institutional Research and Analytics.

**Service Buildings**
The buildings at various locations on campus that house specific services include:

- **Salata Complex**
  Salata Complex, located on Rayen and Wood Streets, houses University planning and construction, maintenance, administration staff, Grounds Department staff and equipment, Central Receiving, Key Control, Motor Pool, various repair shops, Printing Services, and Mail Room.

**Central Utility Plant**
The Central Utility Plant is located south of the new WATTS Center on the north side of campus and produces steam and chilled water for University needs that is distributed through a system of underground tunnels and direct-utilization lines.

**Smith Hall**
Parking Services has been moved to this new location at 275 Fifth Avenue (southeast corner of Rayen and Fifth Avenues).

**Sweeney Hall**
Sweeney Hall—formerly Dana Hall—a classic one-story building located at the corner of Bryson Street and University Plaza, was constructed in 1908. The building houses the Sweeney Welcome Center and the Office of Admissions.

**Tod Hall**
The University’s main administrative offices are in Tod Hall, a former library building built in 1952 and thoroughly renovated in 1978. These offices include:

- Office of the President
- Office of the Provost
- Office of the Vice President for Finance and Business Operations
- Office of the General Counsel
- Division of University Relations
- Alumni and Events Operations
- Marketing and Communications
- Human Resources
- Office of Equal Opportunity and Policy Development
- ASECU Credit Union
- YSU Board of Trustees’ meeting room

**Veterans Resource Center**
Veterans Resource Center

The Carl A. Nunziato Veterans Resource Center, located at 633 Wick Avenue, houses the Office of Veterans Affairs (OVA) which serves as a central location to discuss issues, questions, or concerns current and prospective military and veteran students may have regarding their enrollment, possible funding and academic success.

The Veterans Resource Center (VRC) is a 6,000 square foot, fully handicap accessible facility that is the first of its kind at any university in Ohio. The VRC features lounge space, a computer lab, meeting rooms, a community/class room, kitchenette, ample office space for outside veteran-related organizations, and much more. The VRC is open to all student veterans, currently serving military members, and military dependents who are using veteran’s education benefits.

Students and all interested parties can contact the OVA by visiting our OVA#website, emailing us aveterans@ysu.edu, or calling the office at (330) 941-2503/2523. Individual person-to-person meetings are available and encouraged.

**Ward Beecher Hall**
This building houses the departments of Biology, Chemistry, and Physics and Astronomy. The five-story original unit was constructed in 1958, a major addition was built in 1967, and a small addition comprising chemical storerooms was completed in 1997. It was built with funds contributed by Mahoning Valley Industries and area industrialist Ward Beecher. Presently the building contains 26 laboratories, including a planetarium and a greenhouse, 8 classrooms, 71 academic offices, 56 faculty-research rooms, and a conference-seminar room.

**Williamson Hall**
Opened in fall 2010, Williamson Hall houses the Williamson College of Business Administration offices, including:

- Office of the Dean
- Center for Student Services and the Professional Practice Program
- MBA program
- Lariccia School of Accounting and Finance
- Department of Management
- Department of Marketing

In addition, the building houses 14 classrooms, a Financial Services Lab, a Professional Sales and Business Communication Lab, interview rooms, a 200-seat auditorium, and a conference center. WCBA student organizations share office space in the building, and students have access to eight student team rooms, three networked computer labs, a quiet study lounge, and collaborative areas. Williamson Hall is also home to:

- Center for Nonprofit Leadership,
- Williamson Center for International Business,
- Nathan and Frances Monus Entrepreneurship Center,
- Ohio Small Business Development Center at YSU
- Executive-on-Campus office

The Gallery of Industry, Business, and Entrepreneurship, a spacious sky-lit atrium and café are also part of the 110,000 square feet facility.

LEED-certified by the US Green Building Council, Williamson Hall is the first “green” building on the Youngstown State University campus.
University/Community Outreach
Regional Economic Development Initiative (REDI)
The Regional Economic Development Initiative (REDI) at Youngstown State University (YSU) was established in 1967 as the Center for Urban and Regional Studies (CURS) to act as a research and public service arm of YSU. The mission of CURS has been to integrate professional staff, faculty, students, and other University resources to focus on issues and problems of urban and regional development through an ongoing program of basic and applied research and technical assistance and by providing training for local government, community, and economic development organizations and businesses.

In 2015, CURS transitioned to REDI and assumed an added role as “Navigator” in providing research-based, implementation-focused economic development support services for the Mahoning Valley. REDI’s focus reflects a “plan-impliment” process which parallels the familiar “design-build” process often seen in the architecture and construction industries. This focus will enable REDI to help identify and quantify challenges and opportunities, support economic development implementation, and provide a broad array of support services throughout the Mahoning Valley.

REDI offers federal, state, and private grant-writing, and it provides valuable GIS mapping and data services to a number of local and regional government, nonprofit organizations, and social service agencies throughout the region.

Recent initiatives include studies, strategy development, or project implementation related to Community Crime Prevention, Community Health Initiatives, Green Infrastructure, Urban Transportation, Neighborhood Parks Restoration, Road Condition Assessment, Wayfinding Signage, and Comprehensive Community Planning.

Center for Human Services Development
The Center for Human Services Development (https://ysu.edu/center-for-human-services-development/) is an externally-funded, community outreach department. With the mission to work with organizations and faculty to build capacity through the support of services and research, the Center’s main objective is to increase the ability of organizations to serve the people of the Mahoning Valley. Led by experienced professionals, the Center works to provide a variety of services to community agencies and departments across campus.

The scope of the Center is:
- Establishing and maintaining networks or linkages among service providers and the broader community.
- Offering technical assistance for social service program evaluation.
- Providing training for agency directors, boards, and staff members.
- Conducting community-wide needs assessments and sharing information.
- Helping organizations to develop strategic plans.
- Identifying and obtaining grants for community organizations that are working collaboratively to address community needs.

Professional Services:
- Technical assistance
- Evaluation
- Grant writing
- Data analysis
- Program and grant management
- Professional development

The Center (https://ysu.edu/center-for-human-services-development/) is housed in the Beeghly College of Education and can be contacted by calling (330) 941-3469.

Continuing Education
Continuing education non-credit programs offer area residents a wide variety of adult study or lifelong-learning courses and seminars to meet the needs of a changing society for updating and upgrading professional skills, for mid-career adjustments, and for lifestyle changes.

Area residents participate annually in more than 200 non-credit programs, many of which are in the academic disciplines and professional areas, varying from half-day seminars to multi-week courses conducted in local business and government settings and other off-campus locations.

Center for Creative Retirement
The College for the Over Sixty
The Over Sixty program is a state-funded program providing for the enrollment of Ohioans 60 years of age or older (who have been residents of the state for the preceding 12 months) in undergraduate credit classes on a space-available basis. Residents who meet eligibility requirements based on income level may earn credit toward a degree through the Over Sixty program.

Community Counseling Clinic
The Community Counseling Clinic (CCC) is a training clinic for students who are earning their master’s degree in counseling. The clinic’s counselors and trainees provide individual, family, couples, and group counseling services to YSU students and their families, as well as all children, adolescents, and adults living in Youngstown and its surrounding communities.

The CCC offers a relaxed and confidential environment to discuss personal, relationship, academic, or work-related problems. Examples of matters which may cause one to seek counseling include: academic success-related concerns, relationship problems, family conflicts, adjustment-related problems, depression, anxiety, career indecision, and loss and grief issues. Talking with a counselor can be an important first step in making desired life changes.

Day and evening appointments are available. Appointments can be made in person or by calling (330) 941-3056. The CCC is located in Room 3101 in the Beeghly College of Education, which is at the comer of Fifth and Rayen avenues. Free parking is available. Additional information is available at the Community Counseling Clinic (http://www.ysu.edu/community-counseling-clinic/) website.

The Ohio Small Business Development Center
The Ohio Small Business Development Center (SBDC) and export assistance Network at youngstown state university
The Ohio Small Business Development Center (SBDC) and Export Assistance Network at YSU is part of the most comprehensive and effective business assistance network in the nation. Its purpose is to help existing businesses develop, grow, and retain a competitive advantage in the ever-changing global economy while helping entrepreneurs realize their goals of business ownership.

In Ohio, the SBDC program is a partnership of the Ohio Development Services Agency and the U.S. Small Business Administration. Locally, the SBDC is hosted by Youngstown State University and the Williamson College of Business Administration. The Center provides professional, in-depth business, exporting, and international trade consulting and training to existing and new business ventures to help foster a strong and successful business community.
in the counties they serve. There is no fee for the consulting services, and all company and project information is held in strict confidence.

The Ohio Small Business Development Center and Export Assistance Network at YSU is located in the Williamson College of Business Administration – Room 1155, and can be reached at: (330) 941-2140.

**Telecommunication Services**

**WYSU-FM, 88.5 MHz**

Youngstown State University owns and operates WYSU-FM, a 50,000-watt radio station that serves the Mahoning and Shenango Valley region with fine arts and news and information programming from its studios in Cushwa Hall. The station broadcasts a mix of news and classical music programs on its main analog channel, on its HD1 (digital) channel, and as an internet stream; it also broadcasts all-classical music on its HD2 channel and second internet stream. The station broadcasts at 88.5 MHz in Youngstown, at 88.1 MHz in Ashtabula, and 97.5 MHz in New Wilmington, Pennsylvania.

WYSU-FM is non-commercial, listener-supported public radio, committed to being the community’s leading source for trusted, in-depth news, engaging conversation, and music that stimulates the mind and spirit.

As one of Youngstown State University’s most visible daily representatives to the community, WYSU also strives to be a valuable ambassador to that community, providing a forum to promote the artistic and intellectual activities of the university. The core of the radio operation is a full-time professional staff. Youngstown State University students whose qualifications meet professional broadcasting standards are also employed to support various aspects of the station’s operations.

**FM-SCA Programs**

The University transmits special educational programs for the sight-disabled on a multiplex basis using a sub-carrier frequency of 67 kilohertz.

**Western reserve public media, Northeastern Educational Television of Ohio**

The University is a member of NETO (Northeastern Educational Television of Ohio), a public television consortium of the state universities at Akron, Kent, and Youngstown, which operates UHF Channels 45 and 49.

Common transmitters at Salem and Akron broadcast programs acquired from the Public Broadcasting Service and the Ohio Educational Television Network as well as local programs produced at Kent, Akron, and by contract at Youngstown.

**Honors College**

**HONORS COLLEGE**

**Dean, Amy L. Cossentino**

**Mission of the Honors College**

The mission of the Youngstown State University Honors College is to provide academically talented students of any discipline with a community of excellence to develop their full intellectual and cultural potential. Through a combination of extraordinary learning experiences in small classes and experiential seminars, living-learning communities, unique and flexible resources for commuter students, leadership and innovative engagement activities, service-learning and traditional volunteer initiatives, interdisciplinary projects, research opportunities, and community, regional, and global perspectives, we fulfill this mission. As a direct outgrowth and articulated in the YSU Mission Statement, the Honors College “places students at our center” of an energized and inclusive community of faculty, staff, and alumni who share in the pursuit of life-long excellence in learning and civic engagement.

**Outcomes**

**ENRICHMENT**

Eligible students who desire an enriched education may take honors courses and thus participate in the “honors experience” by applying to the Honors College.

**HONORS DIPLOMA**

Students may apply to the Honors College, pursuing excellence in a broad range of subjects. Successful completion of this guided course of study will be acknowledged with a special designation on the commencement program, diploma, and final transcript.

**Benefits of Joining**

- Students enjoy the benefits of early registration each semester they are actively participating.
- Honors students are part of a community of academically motivated students and alumni.
- Honors students are eligible to live in the Honors College’s living and learning center, Cafaro House Residence Hall, or The Courtyards Apartments - Building #2.
- Course material is covered in much greater depth than in a traditional class. Therefore, Honors students receive a “value-added” educational opportunities.
- Members may use the facilities in Fok Hall, which includes wireless connectivity, study space, and a student lounge.
- As reflected by the transcript and diploma, an Honors student has shown the desire and ability to go above and beyond what is traditionally required by the University. This is particularly impressive to graduate and professional schools and potential employers.
- High-achieving students benefit from the experience of taking classes and learning with some of the most academically talented students in the nation.

**Administration of the Honors College**

The program is operated by the Honors Director under the jurisdiction of the Honors Committee of the University Senate. The Dean reports to the Provost.

**Baccalaureate Honors ENTRANCE REQUIREMENTS**

1. Students qualify with a 3.5 overall grade point average and at least a composite ACT score of 26, or combined SAT score of 1240 on the new SAT (or 1760 on the old SAT).
2. Current YSU students must have completed at least 12 semester hours of college-level study (not to include remedial courses) with a cumulative GPA of at least 3.4.
3. Transfer students must have completed at least 15 semester hours of college-level study accepted for credit at YSU (not to include remedial courses) with a cumulative GPA of at least 3.4.
4. Students enrolled in or eligible to enter the Honors College and others approved by the instructor and Dean of Honors may take honors courses.
5. To remain in good standing in the Honors College, students must maintain a GPA of at least 3.4. Students falling below this level for two consecutive semesters will be dropped from the program.
6. Students who complete no honors work for two consecutive semesters will be suspended from the program. Satisfactory progress must be made in order to fulfill all applicable honors college scholarships.
7. Completing the honors requirements necessitates an average of five to six credit hours of honors work per semester for the first four semesters, unless the student will graduate in less than four years. If graduating in less than four years, the student should work with the Honors College staff to map out a plan for completion. All honors coursework, except for the
senior honors thesis or capstone, should be completed before the senior year.

**Baccalaureate Honors Curriculum**
(for students who enroll beginning Summer semester 2020)

Students who enter into the Honors College beginning summer semester 2020 are required to complete at least 24 semester hours of honors work, including a senior thesis or capstone.

Further requirements include the following:

- Intro to Honors Seminar – 1 credit (to be taken in the first semester)
- Campus Community Partnership Seminar - 1 credit (to be taken after the first semester)
- General Education Requirements – 9 credits (GER’s should be taken as actual honors courses and not contracted)
- Other – 12+ credits (Combination of seminars, upper division courses, or general education requirements)
- Senior Honors Capstone\(^1\) 1-3 credits

\(^1\) During the senior year, a capstone thesis/project in the major department is required. This is generally worth 1-3 semester hours depending upon the department. A faculty advisor, selected by the student and approved by the Director of Honors, will oversee this project. The completed capstone in the form of a thesis should be bound and archived by the Library and stored in the Honors College, Fok Hall. Certain projects other than theses may be presented in poster form or technologically recorded and similarly archived and stored. A public defense is required and may be in the form of an exhibition, recital, formal presentation at a regional/national conference or Quest. Projects completed by individuals, teams, and teams of students working with community officials are all appropriate.

**Associate Honors**

The pre-college requirements for the Honors Associate track are identical to those of the four-year Honors Program. Students who have not completed the college preparatory subjects are admitted to the Honors Associate Program on the condition that their course of study includes at least one course prescribed for correcting a deficiency each semester until the deficiencies have been erased. Courses taken at the college level and used to make up a deficiency will be applied toward the Honors Associate Program.

The following students qualify, upon application for the Honors Associate track:

- Students with a 3.5 overall grade point average and a Composite ACT score of 26 or a combined SAT of 1260 (new) 1760 (old).
- Current YSU students having completed at least 12 semester hours of college-level study (not to include remedial courses) with a cumulative GPA of at least 3.4.
- Students having completed at least 15 semester hours of college-level study accepted for credit at YSU (not to include remedial courses) with a cumulative GPA of at least 3.4.

**Honors Associate Curriculum**

- First Year Honors Seminar – 1 credit (To be taken in either the first semester.)
- Campus Community Partnership Seminar - 1 credit (to be taken after the first semester)
- General Education Requirements – 6 credits (GER’s should be taken as actual honors courses and not contracted.)
- Other – 3+ credits (Combination of seminars, upper division courses, or general education requirements.)
- Honors Capstone – 1-3 Credits

**Individualized Honors Curriculum (IHC)**

An individualized honors curriculum (IHC) is available for high-achieving students who wish to alter any of the requirements listed above for either the associate or baccalaureate Honors Programs. The IHC may be necessary for first-year students entering with more than a year of college credits from College Credit Plus, Advanced Placement and other transfer credits. However, the student should prepare a full proposal that includes:

- application for IHC (available from the Honors Office)
- reasons for choosing not to follow the prescribed honors program
- goals of the IHC
- exact courses and the course format (i.e. honors class, contract honors, independent study, study abroad, etc.) 24 credits at the honors level required
- outcomes of the IHC
- estimated time to completion

**Course Credit Generation**

Honors credit generation includes:

- special sections of traditional courses
- seminars on special topics
- contract honors as necessary
- advanced course work in areas outside of the major
- a common theme when possible
- a capstone project or thesis in the senior year

**Transfer of Honors Credit**

- Honors credit from other institutions will be accepted as honors credit and can be used to partially fulfill the requirements for the Honors Program at Youngstown State University provided that the honors credit was earned in a college-level course with a grade of B or higher.
- Upon application, all students from other honors programs who were in good standing relative to their previous program will be admitted into the YSU Honors Program. Honors credit earned at other institutions will be accepted as honors credit and can be used to partially fulfill the requirements for honors at YSU subject to review by the Honors Program Director.
- To graduate with an Honors diploma, a student must complete at least 13 of the total 24 semester hours of honors course work from YSU, fulfill the depth and breadth requirements of the Honors program, and complete a senior thesis or capstone in the major discipline. For more details, consult with the Honors Dean.
- Students who transfer into the YSU Honors Program have all the rights and privileges granted to its members, e.g., honors housing, priority registration, use of honors facilities, etc.

**Courses of Instruction**

**THE NATURE OF AN HONORS COURSE**

When compared to a non-honors course, an honors course should:

- Cover material in greater depth
- Encompass more complex concepts, stressing analysis
- Place greater emphasis on communication skills
- Include discussion of applicable theories in the field
• Require of the students more preparation and class participation, including more ambitious papers or projects, as well as a greater share of responsibility for learning
• Involve more state-of-the-art technology whenever possible and appropriate

HONORS COLLEGE COURSES

HONR 1500 Intro to Honors 1 s.h.
Prepares students for the expectations and requirements of the Honors Program. Students develop skills that aid in their overall academic endeavors and explore topics pertinent to their development within the Honors Program and as citizens of the university, local, national and global communities.
Prereq.: Admission to the University Honors Program or eligibility for admission to the University Honors Program.

HONR 1599 Special Topics 3 s.h.
An introductory-level examination of some topic appropriate for honors study. Typically team-designed. In certain cases, students may arrange to have the course counted toward the major by negotiation with the major department. With approval of the director of Honors, may be repeated for credit with different topics.
Prereq.: Admission to the Honors Program or permission of instructor and director of Honors.

HONR 2601 Honor Seminar 1-2 s.h.
An interdisciplinary seminar series dealing with topics appropriate to students in the Honors Program. The subjects include, but are not limited to, creativity, the organization and function of the university, the total human being, critical thinking, current events, etc.
Prereq.: Eligibility for the Honors Program.

HONR 2601E Honor Seminar Magazine Editing and Production 1-2 s.h.
An interdisciplinary seminar series dealing with topics appropriate to students in the Honors Program. The subjects include, but are not limited to, creativity, the organization and function of the university, the total human being, critical thinking, current events, etc.
Prereq.: Eligibility for the Honors Program.

HONR 2601P Honor Seminar Campus Community Partnerships 1-2 s.h.
An interdisciplinary seminar series dealing with topics appropriate to students in the Honors Program. The subjects include, but are not limited to, creativity, the organization and function of the university, the total human being, critical thinking, current events, etc.
Prereq.: Eligibility for the Honors Program.

HONR 2602 Honor Seminar 1-2 s.h.
An interdisciplinary seminar series dealing with topics appropriate to students in the Honors Program. The subjects include, but are not limited to, creativity, the organization and function of the university, the total human being, critical thinking, current events, etc.
Prereq.: Eligibility for the Honors Program.

HONR 2602P Honor Seminar Exploring Youngstown 1-2 s.h.
An interdisciplinary seminar series dealing with topics appropriate to students in the Honors Program. The subjects include, but are not limited to, creativity, the organization and function of the university, the total human being, critical thinking, current events, etc.
Prereq.: Eligibility for the Honors Program.

HONR 2602U Honor Seminar Social Media for Organization 1-3 s.h.
An interdisciplinary seminar series dealing with topics appropriate to students in the Honors Program. The subjects include, but are not limited to, creativity, the organization and function of the university, the total human being, critical thinking, current events, etc.
Prereq.: Eligibility for the Honors Program.

HONR 2699 Special Topics 3 s.h.
A close examination of some topic appropriate for lower-division honors study. Typically team-designed. In certain cases, students may arrange to have the course counted toward the major by negotiation with the major department. With approval of the director of Honors, may be repeated for credit with different topics.
Prereq.: Admission to the Honors Program or permission of instructor and director of Honors.

HONR 2699S Special Topics Social Media for Organization 3 s.h.
A close examination of some topic appropriate for lower-division honors study. Typically team-designed. In certain cases, students may arrange to have the course counted toward the major by negotiation with the major department. With approval of the director of Honors, may be repeated for credit with different topics.
Prereq.: Admission to the Honors Program or permission of instructor and director of Honors.

HONR 3701 University Honors Seminar 1-2 s.h.
A critical examination of selected areas underlying civilization, embracing and integrating the particular studies of science, society, and the humanities.
Prereq.: Eligibility for the Honors Program.

HONR 3701V University Honor Seminar The U.S. and the World: Empire of Indispensable Power 1-2 s.h.
S. and the World: Empire of Indispensable Power. A critical investigation of selected areas underlying civilization, embracing and integrating the particular studies of science, society, and the humanities.
Prereq.: Eligibility for the Honors Program.

HONR 3702 University Honors Seminar 1-2 s.h.
A critical examination of selected areas underlying civilization, embracing and integrating the particular studies of science, society, and the humanities.
Prereq.: Eligibility for the Honors Program.

HONR 3799 Special Topics 3 s.h.
A close examination of some topic appropriate for upper-division honors study. Typically team-designed. In certain cases, students may arrange to have the course counted toward the major by negotiation with the major department. With approval of the director of Honors, may be repeated for credit with different topics.
Prereq.: Admission to the Honors Program or permission of instructor and director of Honors.

HONR 3799C Special Topics: Independent Studies 1-3 s.h.
A close examination of some topic appropriate for upper-division honors study. Typically team-designed. In certain cases, students may arrange to have the course counted toward the major by negotiation with the major department. With approval of the director of Honors, may be repeated for credit with different topics.
Prereq.: Admission to the Honors Program or permission of instructor and director of Honors.

HONR 3799D Special Topics Ohio in Next Ten Years: Geographic Perspective 1-3 s.h.
A close examination of some topic appropriate for upper-division honors study. Typically team-designed. In certain cases, students may arrange to have the course counted toward the major by negotiation with the major department. With approval of the director of Honors, may be repeated for credit with different topics.
Prereq.: Admission to the Honors Program or permission of instructor and director of Honors.

HONR 3799E Special Topics Ohio and 2020 Election 3 s.h.
A close examination of some topic appropriate for upper-division honors study. Typically team-designed. In certain cases, students may arrange to have the course counted toward the major by negotiation with the major department. With approval of the director of Honors, may be repeated for credit with different topics.
Prereq.: Admission to the Honors Program or permission of instructor and director of Honors.
HONR 4890  Senior Honors Thesis  1-3 s.h.
Directed research for students pursuing senior honors thesis research. May be repeated for up to 3 s.h.
Prereq.: Junior status; completion of 18 s.h. of Honors coursework; submission of an approved Honors thesis proposal; and permission of the honors director.

HONR 4890C  Senior Honors Thesis: Capstone  1-3 s.h.
Directed research for students pursuing senior honors thesis research. May be repeated for up to 3 s.h.
Prereq.: Junior status; completion of 18 s.h. of Honors coursework; submission of an approved Honors thesis proposal; and permission of the honors director.

Contract Honors Courses
Any course other than those which are offered as an honors course (ENGL 1550H Honors Writing 1, MATH 1585H Honors Accelerated Calculus 1, etc.), remedial, or high school remedial courses may be taken for honors credit with the concurrence of the faculty teaching the class and the approval of the Honors Program Director.

The contract honors option does not involve more credit hours for a course, but rather credit of a different kind. Proposals should involve not simply more work on the part of the student, but rather work in greater depth. Proposals are initiated by the student after consulting with the instructor, then carefully reviewed by the department chair. Chairs certify that by the standards of the discipline, proposals meet the criteria listed. Contract Honors Proposals are generated online through the Honors Student Dashboard with approval of proposals completed electronically. More information and instructions for using the Dashboard can be obtained by contact the Honors College.

Remedial courses are not suitable for contract honors. Contracts are not normally approved when an honors section exists for the same course (e.g. ENGL 1551H Honors Writing 2). Projects in the historiography of any discipline are acceptable. Contract proposals must be submitted by the published due date.

Completion status is reported by faculty to the Honors Dean via the online Honors Contract Completion Tracking System. Instructions for accessing the system are sent to faculty via email by the week before finals week.

University Honors Program Engagement Requirements

VOLUNTEERISM AND SERVICE-LEARNING
Honors students are required to complete 60 hours of volunteerism on an annual basis. Reporting of volunteerism is required at the conclusion of each activity. Students are required to engage in at least two Honors College sponsored volunteer events of their choice.

ENGAGEMENT/LEADERSHIP/CO-CURRICULARS
Students who connect to the university through active participation demonstrate higher satisfaction and retention. Honor students are required to engage in student life.

Student Organizations
All Honors Students are members of the Honors Trustees. The Trustees is an official student organization at YSU. The group sponsors events and volunteer projects available to the University community at large. Other organizations include the Poverty Awareness in Youngstown group, MALAINA, and Women in Honors. Associated organizations include Alpha Lambda Delta and Phi Kappa Phi.

National Fellowships and Scholarships
The Honors College leads the National Scholarship Committee composed of faculty and staff from across the campus to advertise scholarship opportunities and prepare students for prestigious competitions such as the Truman, Marshall, Goldwater, and Rhodes Scholarships. Information and applications for these scholarships are maintained by the Honors College Office.

STUDY ABROAD/GLOBAL CITIZENSHIP
Honors students are encouraged to participate in study abroad experiences. The Honors College staff will assist students with letters of recommendation for participation and potential scholarship opportunities. Opportunities for Global Citizenship will be available for students and may take the form of Volunteerism or Leadership opportunities when a formal study abroad experience is not possible.

LIVING-LEARNING ENVIRONMENTS (OPTIONAL)
Both residential and commuter students can enjoy the community that exists within honors. Two on-campus honors residential learning communities--Cafaro House and Building #2 of the Courtyards are available. Cafaro House is equipped with a computer lab and academic wing. The accommodations are 4-, 8-, and 18-person suites with two students per room. The Courtyards offer either 4-person, 2-person, or single apartments. No matter the apartment type, each student has his/her own bedroom. Fok Hall now serves as the home for the Honors College staff and is situated half-way between both residential communities and within convenient walking distance from the six academic colleges. Available in Fok Hall is a student lounge, conference room, study space, meeting rooms, relaxation room, and the Penguin Pantry--all of which provide space for community building and learning. Commuter and residential students enjoy the home-like atmosphere within Fok Hall to foster learning and collaboration.

DOCUMENTATION OF ANNUAL STUDENT LEARNING OUTCOMES AND PROGRAM REQUIREMENT COMPLETION
Honors students are required to complete documentation of all requirements for the annual end of the year review. The review will determine scholarship renewals and progress in the program to meet annual student learning outcomes for the five pillars: Leadership/Engagement, Interdisciplinary Perspectives, Volunteerism/Service Learning, Research and Scholarship, and Global Citizenship.

Students are required to maintain records and report all service conducted outside of the university, student work demonstrating mastery of student learning outcomes, and other scholarly and academic work of added value to retain in the online portfolio.

DOCUMENTARY RECOGNITION OF SUCCESS IN THE HONORS COLLEGE
GRADE RECORDS
A student’s permanent record will be the sole official record of his or her honors courses and seminars, each of which will be designated with an "H" after the catalog number, or in some cases, with a note detailing that honors credit was earned for that particular course.

COMPLETION OF THE HONORS COLLEGE REQUIREMENTS
Upon satisfactory completion of Honors requirements, the Honors Dean will initiate having the appropriate distinction entered on the student’s record and diploma.

Special Academic Programs
Honors College
The Honors College is open to students meeting select criteria from any associate or baccalaureate program. Completion of Honors College requirements results in the placement of the Honors College distinction on the student transcript and diploma.
Early Enrollment Opportunities

Youngstown State University offers programs that provide additional academic challenges to 7th - 12th-grade students who have demonstrated college readiness. The programs allow students to experience college-level coursework, supplement their high school curriculum, enjoy special interests, and accumulate college credit. Course work may be applied toward a program at Youngstown State University or may be transferable. Students who plan to continue at YSU after graduation from high school must reapply to YSU and provide a final high school transcript to the Office of Admissions. These programs include:

College credit plus

The YSU College Credit Plus program (CCP) offers credit-bearing college courses to 7th - 12th-grade students. Students earn college credit on an official YSU transcript that is transferable to any state-funded college or university in Ohio and some private and out-of-state schools. CCP students who plan to continue at YSU after graduating high school must reapply to YSU and provide their final high school transcript. In addition:

• Students can enroll in any class for which they are qualified. Classes may be taken on campus, online, or at the high school (course offerings vary). See the College Credit Plus (https://ysu.edu/ocat/college-credit-plus/) website for eligibility and information about course offerings in each school district.
• There are two payment options in the CCP program. Students can either be self-pay (Option A) or state-funded (Option B). See the Student Cost: Option A vs Option B (https://ysu.edu/ocat/college-credit-plus/student-cost-option-vs-option-b/) webpage for more information.

College tech prep

Ohio College Tech Prep blends high-level academics with advanced career technical education. Focused on student success and workforce development, this educational initiative requires collaboration among secondary and post-secondary partners to support students through a smoothly-structured transition from high school to college careers.

Students successfully completing the secondary portion of College Tech Prep and continuing in their career pathway at the post-secondary level may earn an articulated college credit or Career-Technical Credit Transfer (CTCT)CTAGs.

College Tech Prep is coordinated in Ohio through six regional centers. Ohio College Tech Prep is jointly managed by the Ohio Department of Higher Education (formerly the Ohio Board of Regents) and the Ohio Department of Education’s Office of Career-Technical Education. For more information, contact the Office of College Access and Transition or visit the College Tech Prep (http://cms.ysu.edu/administrative-offices/associate-degree-programs/college-tech-prep/) site.

Youngstown Rayen Early college (YRec)

YREC, the first school of its kind at a public university in Ohio, helps Youngstown city school district students succeed in high school and make a successful transition to higher education. From YEC’s home base in the Rayen Building, just south of the YSU campus, students take a combination of high school and university classes, graduating from high school with up to 64 hours of college credit. Youngstown Rayen Early College was developed with the assistance of the KnowledgeWorks Foundation and the Bill and Melinda Gates Foundation.

Individualized Curriculum Program

The student whose needs are not met by existing conventional programs may wish to investigate and apply for the Individualized Curriculum Program (ICP). This option requires a student to design the curriculum suited to his or her particular background and needs, allowing alternative paths for reaching the currently offered undergraduate degrees.

A student admitted to the program will have the help of a committee of faculty advisors selected by the student. This committee will help to develop a program that will serve a valid educational goal not attainable within the regular curricular structure of the University. To receive approval, the overall program needs to be of a scope and intensity comparable to conventional programs leading to the degree being sought.

Students wishing to develop an individualized curriculum must meet the following requirements:

1. Sophomore standing 32 s.h. completed (for baccalaureate degree)
2. GPA of at least 2.50
3. Students pursuing a baccalaureate degree must have at least 30 s.h.’s to complete once the program has been approved. Students pursuing an associate degree must have at least 20 s.h.’s remaining upon approval.

The ICP does not provide for new or modified courses or degrees, or for changes in course prerequisites. Credit by examination may be sought, subject to approval through normal channels.

Detailed information is available from the director of the program, Room 104, DeBartolo Hall or on the web at ICP (http://www.ysu.edu/academics/college-liberal-arts-social-sciences/individualized-curriculum-program/).

Interdisciplinary Programs

The University offers a number of interdisciplinary programs. More information on these programs may be found in the College of Liberal Arts and Social Sciences section of the catalog:

• Africana Studies
• American Studies
• Global Education
• Judaic and Holocaust Studies
• Islamic Studies
• Peace and Conflict Studies
• Women’s Studies
• Working-Class Studies

International Programs Office (IPO)

The IPO is an integral part of the Division of Academic Affairs and is responsible for coordinating the international dimensions of the university, including international student and faculty services, study abroad and exchange programs, and servicing the English Language Institute (ELI).

For more information on International Student Services, see International Programs Office (http://cms.ysu.edu/administrative-offices/center-national-studies-and-programs/cisp-home/) under Student Services; for more information about international student admission, see International Applicants.

Study Abroad

Youngstown State University encourages students to engage in international study as part of their YSU education. Credits earned through study abroad at a post-secondary institution overseas must be approved in advance through the IPO in consultation with academic colleges and departments. Students studying abroad through YSU-affiliated programs and institutions with the requisite amount of credits, maintain full-time status at YSU and remain eligible for state, federal, and institutional financial aid. Credits earned by foreign study through YSU-approved study-abroad programs are treated as transfer credit and therefore are not computed into the student’s grade point average. Students must be in good academic standing and meet the GPA...
requirements of both YSU and the host program in order to be approved to study abroad.

**Scholarships for Study Abroad**

Most YSU tuition scholarships apply to study-abroad programs. The IPO also coordinates advising for the Fulbright, Gilman, Freeman-Asia, National Security Education Program (NSEP), and Rhodes Scholarships.

**Study-Abroad Programs**

**International Exchange Programs**

YSU students pay tuition and fees at YSU and exchange places with students from the overseas institution for one or two semesters. YSU maintains reciprocal exchange agreements with the University of Liege in Belgium, University of Jyväskylä in Finland, Meiji University in Japan, Fontys University of Applied Sciences in the Netherlands, Sejong University in South Korea, and Providence University in Taiwan. All programs offer coursework in English.

**Affiliated Programs**

Youngstown State University is a member of the Ohio International Consortium (OIC). This membership provides YSU students with access to OIC scholarships and study-abroad opportunities. YSU maintains affiliation agreements with other high-quality study-abroad organizations.

**Faculty-Led study abroad Courses**

The IPO works with YSU faculty who teach YSU international field study courses, which are YSU courses that incorporate an international component, usually one to four weeks in length. Recent YSU faculty-led study abroad programs have been conducted in the Bahamas, Belize, China, Costa Rica, Czech Republic, Dominican Republic, Ecuador, England, France, Germany, Ghana, Greece, Guatemala, Israel, Italy, Japan, Mexico, Poland, Rwanda, South Korea, Spain and Taiwan.

**The English Language Institute**

Established in 1996, the English Language Institute (ELI) at Youngstown State University offers an intensive English program with non-credited classes for English language learners. In addition, the ELI provides an orientation to college life and culture in the United States. Courses are available both to international students and to immigrants.

The ELI welcomes all students, as well as professionals, who wish to increase their English language proficiency. The ELI prepares students for academic study and life in the United States, using the following curriculum:

- Six levels of classes (Foundations, Levels 1-5) covering Grammar, Reading, Writing, Listening, and Speaking
- 20 hours of instruction per week.
- Five 8-week modules per academic year.

ELI admission is through the International Programs Office. Students must be at least 17 years old or have completed high school. Successful completion of Level 5 in the majority of YSU master’s programs. For more information and to submit an application, please visit the ELI (http://cms.ysu.edu/administrative-offices/english-language-institute/eli-home/) website.

**Off-site Degree Programs**

**Allied Health and Public Health**

The University offers baccalaureate degree-completion programs in allied health and in public health on the campus of Lorain County Community College (LCCC). Allied health is also offered at Cuyahoga Community College (CCC) and Lakeland Community College (LCC). Students in these programs are registered at Youngstown State University and attend classes online or at the LCCC, CCC, or LCC campuses. Courses are taught by YSU faculty members via online (web-based delivery). LCCC, CCC, and LCC provide support services and access to facilities, such as computer labs and the library, including Ohio LINK online research services. Students are advised by YSU faculty members or a YSU academic advisor. Faculty members may hold office hours at the off-site campus, online, or through video conferencing systems. Students communicate with faculty members using a variety of methods including online discussions, e-mail, video conferencing, phone, and face-to-face meetings.

**Criminal Justice**

Youngstown State University offers a baccalaureate degree-completion program in criminal justice on the campuses of Lorain County Community College (LCCC) and Lakeland Community College (LCC). Students in this program are registered at YSU and attend classes at the LCCC or LCC. Courses are taught by YSU faculty members, using interactive video conferencing systems. LCCC and LCC campuses provide support services and access to facilities, such as computer labs and the library, including Ohio LINK online research services. Students are advised by a YSU academic advisor. Faculty members may hold office hours online, by phone, or through video conferencing systems. Students communicate with faculty members using a variety of methods including online discussions, e-mail, video conferencing, phone, and face-to-face meetings.

**Social Work**

YSU offers Bachelor of Social Work degree completion programs at the following off-campus sites:

- Lakeland Community College (Kirtland, Ohio)
- Loraine Community College (Elyria, Ohio)

Students in these programs take course work at the host community college and combine credits earned with YSU social work courses taught on the site of the respective community college to fulfill requirements for the BSW degree. All YSU instruction is provided by YSU faculty members through face-to-face meetings, telephone, or video conferencing. Students have access to Ohio LINK online research services and student support available on the community college campus.

**Electric Utility Technology, Power Plant Option**

Youngstown State University offers an Associate of Technical Studies degree in electric utility technology, power plant option (EUT/PPT). Students interested in enrolling in the program are encouraged to contact Dan Coyne at dpcoyne@ysu.edu or (330) 941-1743.

**Title II, Teacher Education**

**Title II of the Higher Education Act: Teacher Education**

The United States Department of Education maintains data on pass rates on licensure exams for all institutions of Higher Education. The most recent data on the pass rate for Youngstown State University and other Ohio institutions is available on the Department of Education (https://title2.ed.gov/Public/Home.aspx) website.

**Faculty and Staff**

**University Administration**

**Ohio Department of Higher Education**

The Ohio Department of Higher Education (https://www.ohiohighered.org/board/) is a Cabinet-level agency for the Governor of the State of Ohio that oversees higher education for the state.

The Ohio Board of Regents, a nine-member advisory board to the chancellor with two ex-officio representatives from the state legislature, was created in 1963 by the General Assembly. Members of the Board of Regents are appointed by the governor with the advice and consent of the senate.
Responsibilities of the board include developing an independent annual report on the Condition of Higher Education in the state of Ohio and issuing an annual performance review of the chancellor. The board is also responsible for advising the chancellor on issues of statewide importance affecting higher education.

<table>
<thead>
<tr>
<th>Member</th>
<th>Term Expires</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chancellor Randy Gardner (ex-officio)</td>
<td><a href="https://www.ohiohighered.org/chancellor-gardner/">https://www.ohiohighered.org/chancellor-gardner/</a></td>
</tr>
<tr>
<td>Sen. Peggy Lehner (ex-officio)</td>
<td><a href="http://www.ohiohighered.org/node/161">http://www.ohiohighered.org/node/161</a> (<a href="http://www.ohiohighered.org/node/161/">http://www.ohiohighered.org/node/161/</a>)</td>
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<td>Vacant</td>
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**University Administration**

**University Board of Trustees**

<table>
<thead>
<tr>
<th>University Board of Trustees</th>
<th>Term Expires</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anita A. Hackstedde, Chair</td>
<td>2021</td>
</tr>
<tr>
<td>James E. &quot;Ted&quot; Roberts</td>
<td>2022</td>
</tr>
<tr>
<td>John R. Jakubek, Vice Chair</td>
<td>2023</td>
</tr>
<tr>
<td>Molly S. Seals</td>
<td>2024</td>
</tr>
<tr>
<td>Michael A. Peterson</td>
<td>2025</td>
</tr>
<tr>
<td>Capri S. Cafaro</td>
<td>2026</td>
</tr>
<tr>
<td>Charles T. George, Secretary</td>
<td>2027</td>
</tr>
<tr>
<td>Allen L. Ryan, Jr.</td>
<td>2028</td>
</tr>
<tr>
<td>Victoria M. Woods, Student Trustee</td>
<td>2021</td>
</tr>
<tr>
<td>Galena G. Lopuchovsky, Student Trustee</td>
<td>2022</td>
</tr>
</tbody>
</table>

**Executive Level**

<table>
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<tr>
<th>Executive Level</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>James P. Tressel, MA</td>
<td>President</td>
</tr>
<tr>
<td>Brian N. Smith, PhD</td>
<td>Provost and Vice President for Academic Affairs</td>
</tr>
<tr>
<td>Holly A. Jacobs, JD</td>
<td>Vice President and General Counsel</td>
</tr>
<tr>
<td>Neal P. McNally, MPA</td>
<td>Vice President for Finance and Business Operations</td>
</tr>
<tr>
<td>Eddie J. Howard Jr., EdD</td>
<td>Vice President for Student Affairs</td>
</tr>
<tr>
<td>William M. Sherman, PhD</td>
<td>Vice President for Institutional Effectiveness and Board Professional</td>
</tr>
</tbody>
</table>

**Division of Academic Affairs**

<table>
<thead>
<tr>
<th>Division of Academic Affairs</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kevin E. Ball, PhD</td>
<td>Associate Provost, Academic Programs and Planning</td>
</tr>
<tr>
<td>Jennifer Pintar, PhD</td>
<td>Associate Provost, Academic Administration</td>
</tr>
<tr>
<td>Nathan P. Myers, PhD</td>
<td>Associate Provost, International Programs</td>
</tr>
<tr>
<td>Carol Lynnett Bennett, MA</td>
<td>Assistant Provost, Diversity, Equity, and Inclusion</td>
</tr>
<tr>
<td>Charles L. Howell, PhD</td>
<td>Dean, BCOE, Beeghly College of Liberal Arts, Social Sciences, and Education</td>
</tr>
</tbody>
</table>

**Division of Enrolment Planning and Management**

<table>
<thead>
<tr>
<th>Division of Enrolment Planning and Management</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jeanne M. Herman, BSBA</td>
<td>University Registrar</td>
</tr>
</tbody>
</table>

**Division of Finance and Administration**

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<tr>
<th>Division of Finance and Administration</th>
<th>Position</th>
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<tbody>
<tr>
<td>Neal P. McNally, MPA</td>
<td>Vice President for Finance and Business Operations</td>
</tr>
<tr>
<td>Katrena S. Davidson, CPA, MBA</td>
<td>Controller</td>
</tr>
<tr>
<td>John P. Hyden, BCT</td>
<td>Associate Vice President, Facilities Maintenance</td>
</tr>
<tr>
<td>Susan Ewing, BSBA</td>
<td>Bursar</td>
</tr>
<tr>
<td>Terri Orlando, MBA</td>
<td>Budget Officer, Academic Affairs</td>
</tr>
<tr>
<td>James A. Yukech, MSE</td>
<td>Associate Vice President for Technology and Chief Information Officer</td>
</tr>
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</table>

**Division of Legal Affairs and Human Resources**

<table>
<thead>
<tr>
<th>Division of Legal Affairs and Human Resources</th>
<th>Position</th>
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<tbody>
<tr>
<td>Holly A Jacobs, JD</td>
<td>Vice President and General Counsel</td>
</tr>
<tr>
<td>Gregory Morgione, JD</td>
<td>Associate General Counsel</td>
</tr>
<tr>
<td>Cynthia Kravitz, JD</td>
<td>Associate Vice President of Human Resources / Chief Human Resources Officer</td>
</tr>
<tr>
<td>David Sipusic, JD</td>
<td>Associate General Counsel, Research and EEO Compliance</td>
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</table>

**Division of Multicultural Affairs**

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<th>Division of Multicultural Affairs</th>
<th>Position</th>
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<tbody>
<tr>
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</table>

**Division of Student Experience**

<table>
<thead>
<tr>
<th>Division of Student Experience</th>
<th>Position</th>
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</thead>
<tbody>
<tr>
<td>Eddie J. Howard Jr., EdD</td>
<td>Vice President for Student Affairs</td>
</tr>
<tr>
<td>Joy L. Polkabla Byers, MA</td>
<td>Executive Director, Campus Recreation and Wellbeing</td>
</tr>
<tr>
<td>Nicole Kent-Strollo, EdD</td>
<td>Director, Student Outreach and Support</td>
</tr>
<tr>
<td>John L. Young, BS</td>
<td>Executive Director, Kilcawley Center</td>
</tr>
</tbody>
</table>
Erin E. Driscoll, BA  Executive Director, Student Experience and Residence Life
Elaine Ruse, MBA  Executive Director, Student Enrollment Services
Erin Hungerman, MS  Associate Director, Residence Life & University Conduct Officer

Division of Student Success

Division of Student Success  Position
Claire Berardini, PhD  Associate Provost, Student Success
Amy Gordon, MA  Director, Comprehensive Testing Center
Justin Edwards, EdD  Director, Career & Academic Advising
Ann Jaronski, PhD  Director, Student Counseling Center
Leslie Page, MHE  Director, First Year Student Services
Becky L. Viani, MSE  Director, Center for Student Progress
Kenneth Pugh, MBA  Director, Upward Bound/Scope

Division of University Relations

Division of University Relations  Position
Shannon Tirone, MS  Associate Vice President for University Relations
Ronald A. Cole, BA  Director, University Communications
Jacquelyn M. LeViseur, BA  Director, Alumni and Events
Ross L. Morrone, MS  Director, University Marketing
Gary A. Sexton, MM  Director, WYSU-FM
Shawn Varano, BSAS  Chief of Police

Full-Service Faculty

A

Dr. Samuel Adu-Poku  Professor of Art
Graduate Faculty Member
B.A., University of Science and Technology (Ghana), 1987
Dip. Ed., University of Science and Technology (Ghana), 1988
M.Ed., University of New Brunswick (Canada), 1995
Ph.D., University of British Columbia (Canada), 2002

Dr. Farzad Ahmadi  Assistant Professor of Electrical and Computer Engineering
Associate degree, Rasht Technical and Vocational College, 2005
B.S., Shiraz University of Technology, 2007
M.S. Shahid Beheshti University, 2010
Ph.D., The University of Akron, 2018

Dr. Jeffrey B. Allen  Dean of the Bitonte College of Health and Human Services and Professor of Psychology
B.S., Ball State University, 1985
M.A., Bradley University, 1989
Ph.D., University of Mississippi, 1994

Dr. Mari L. Alschuler  Associate Professor of Social Work
Graduate Faculty Member
B.A., Brown University, 1980
M.Ed., Teachers College of Columbia University, 1987
M.S.W., Fordham University, 1990
Ph.D., Barry University, 2012

Dr. Isam E. Amin  Professor of Geological and Environmental Sciences
Graduate Faculty Member
B.S., University of Khartoum, 1977
M.S., New Mexico Inst. of Mining and Technology, 1983
Ph.D., University of Nevada-Reno, 1987

Dr. Corey E. Andrews  Professor of English
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B.A., Miami University, 1992
M.A., Ohio University, 1995
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Joseph Angelo  Lecturer of Marketing
B.S., Youngstown State University, 1992
M.S., Youngstown State University, 1995
M.B.A., Case Western Reserve University, 2004

Dr. Felicia P. Armstrong  Associate Professor of Geological and Environmental Sciences
Graduate Faculty Member
B.S., University of Dayton, 1987
M.S., Alabama AM University, 1996
Ph.D., Oklahoma State University, 2003

Dr. Christopher Amtsen  Assistant Professor of Chemistry
B.S., University of Connecticut, 2008
Ph.D., University of California, Los Angeles, 2014

Dr. Abdurrahman Arslanyilmaz  Associate Professor of Computer Science and Information Systems
Graduate Faculty Member
B.E., Gazi University (Turkey), 1998
Certificate, Intensive English School, Middle East Technical University (Turkey), 2000
M.Ed., University of Missouri-Columbia, 2002
Ph.D., Texas AM University, 2007

Dr. David K. Asch  Associate Professor of Biological Sciences
Graduate Faculty Member
B.S., University of Nebraska-Lincoln, 1981
M.S., Creighton University, 1983
Ph.D., University of Kansas Medical Center, 1991

Dr. Diana Awad-Scrocco  Associate Professor of English
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B.A., Youngstown State University, 2006
M.A., Kent State University, 2008
Ph.D., Kent State University, 2012

Dr. Daniel Ayana  Professor of History
Graduate Faculty Member
B.A., Addis Ababa University, 1980
M.A., Addis Ababa University, 1984
Ph.D., University of Illinois at Urbana-Champaign, 1995

B

Dr. Rebecca Lee Badawy  Associate Professor of Management
Graduate Faculty Member
B.A., State University of New York at Buffalo, 2008
M.A., West Chester University of Pennsylvania, 2010
Ph.D., State University of New York at Buffalo, 2014
Dr. Morgan Bagley
Assistant Professor of Kinesiology and Sport Science
B.S., Mount Union College, 2003
M.A., Kent State University, 2005
Ph.D., Kent State University, 2015

Dr. Snjezana Balaz
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B.S., Northland College, 2001
M.S., University of Nebraska, 2005
Ph.D., University of Nebraska, 2007

Dr. Ganesaratnam K. Balendiran
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Ph.D., University of Wisconsin-Madison, 1991

Dr. Kevin E. Ball
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D.N.P., Case Western Reserve University, 2009

Dr. Rebecca A. Barnhouse
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B.A., Florida State University, 1983
M.A., University of North Carolina, 1986
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Christopher Barzak
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M.F.A., Chatham University, 2010

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B.S., Rutgers University, School of Business, 1995
M.S., Temple University, Fox School of Business, 2002
Ph.D., University of Pittsburgh, 2008

Dr. Laura L. Beadling
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M.A., Purdue University, 2001
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Dr. Jane Beese
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M.A., Case Western Reserve University, 1991
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Dr. Jennifer Behney
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B.A., Capital University, 1995
M.A., University of Findlay, 1997
Ph.D., Michigan State University, 2011

Dr. Christopher M. Bellas
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B.A., Edinboro University of Pennsylvania, 1997
A.S., Edinboro University of Pennsylvania, 1998
M.S., Youngstown State University, 2001
Ph.D., Kent State University, 2007

Dr. James A. Benedict
Associate Professor of Physical Therapy
Graduate Faculty Member
B.S., The Ohio State University, 1982
M.Ed., Kent State University, 1989
Ph.D., Walden University, 2016

Dr. Terry Benton
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B.A., Youngstown State University, 1999
M.A., Youngstown State University, 2001
Ph.D., Kent State University, 2014

Dr. Deborah Fairchild Benyo
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B.S., University of New Hampshire, 1985
M.S., The Ohio State University, 1987
Ph.D., The Ohio State University, 1991

Margaret Bileci
Lecturer of Social Work
B.A., Mount Vernon Nazarene University, 2002
M.S.W., Cleveland State University, 2007

Sheila M. Blank
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B.S.N., Youngstown State University, 2001
School Nurse License, Youngstown State University, 2005
M.S.N., Youngstown State University, 2007

Dr. Shelley Blundell
Assistant Professor of Communication
Graduate Faculty Member
B.A., Kent State University, 2006
B.S., Kent State University, 2007
M.L.S., Kent State University, 2009
Ph.D., Kent State University, 2017

Dr. Afriifah Bobbie
Assistant Professor of Mechanical, Industrial, and Manufacturing Engineering
Graduate Faculty Member
B.S., University of Florida, 2007
M.S., University of Central Florida, 2012
Ph.D., University of Central Florida, 2016

Dr. Ewelina Boczkowska
Associate Professor of Music
Graduate Faculty Member
D.C.E., Jean-de-Brebeuf College and Vincent-d'Indy School of Music, 2000
B.M., McGill University, 2002
Ph.D., University of California, 2009

Dr. Brian Bonhomme
Professor of History
Graduate Faculty Member
B.A., City College of the City University of New York, 1993
M.A., City College of the City University of New York, 1996
Dr. Theodore R. Bosela
Professor of Engineering Technology
Ph.D., The City University of New York Graduate Center, 2000
B.E., Youngstown State University, 1981
M.S., University of Akron, 1985

Dr. Frank J. Bosso
Professor of Kinesiology and Sport Science
Ph.D., NEOUCOM / Kent State University, 1990
B.S., Slippery Rock University, 1978
M.S., West Virginia University, 1979

Dr. Philip Sean Brady
Professor of English
Graduate Faculty Member
B.A., Bucknell University, 1977
M.A., University of Delaware, 1979
M.A., San Francisco State University, 1986
Ph.D., State University of New York, 1990

Dr. Russell Brickey
Lecturer of English
B.A., University of Oregon, 1994
M.F.A., Purdue University, 2003
Ph.D., Purdue University, 2010

Dr. Margaret L. Briley
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Graduate Faculty Member
B.S., Virginia Tech, 2005
M.S., Virginia Tech, 2007
Ph.D., Virginia Tech, 2015

Dr. Kristin L. Bruns
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B.S., University of South Dakota, 2006
M.A., University of South Dakota, 2008
Ph.D., Kent State University, 2014

Dr. Jeffrey M. Buchanan
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Graduate Faculty Member
A.B., University of Michigan, 1990
M.A., University of Pittsburgh, 1997
Ph.D., University of Michigan, 2002

Dr. William R. Buckler
Associate Professor of Geography
B.A., Wayne State University, 1969
M.A., Michigan State University, 1973
Ph.D., Michigan State University, 1981

Edward Burden
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B.E., Youngstown State University, 2010
M.S., The Ohio State University, 2012

Dr. Michael Butcher
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Graduate Faculty Member
B.S., Christopher Newport University, 1996
M.S., Wake Forest University, 2000
Ph.D., University of Calgary, 2006

Dr. Alexis Byers
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Graduate Faculty Member
B.S., Whittenberg University, 2014
Ph.D., Western Michigan University, 2018

C

Dr. Jonathan J. Caguia
Associate Professor of Biological Sciences
Graduate Faculty Member
B.S., University of Michigan, 1988
Ph.D., Michigan State University, 1995

Dr. Kivie Cahn-Lipman
Assistant Professor of Music
B.M., Oberlin College, 2001
M.M., Juilliard, 2003
D.M.A., University of Cincinnati, 2016

Laura Calcagni
Assistant Professor of Nursing
B.S.N., Youngstown State University, 1999
M.S.N., Youngstown State University, 2013

Dr. Craig S. Campbell
Professor of Geography
B.A., Indiana University (Purdue University at Indianapolis), 1984
M.A., University of Kentucky, 1987
Ph.D., University of Kansas, 1993

Lori A. Carlson
Senior Lecturer of Mathematics and Statistics
B.S., Youngstown State University, 1988
M.S., Youngstown State University, 1997

Dr. Cara A. Carramusa
Assistant Professor of Physical Therapy
Graduate Faculty Member
B.S., D’Youville College, 2000
M.S., D’Youville College, 2000
Ed.D., Youngstown State University, 2019

Dr. Wendy S. Case
Lecturer of Music
B.M., University of Michigan, 2008
M.M., Cleveland Institute of Music, 2010
D.M.A., State University of New York, Stony Brook, 2015

Dr. Dawna Lynn Cerney
Associate Professor of Geography
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B.S., University of Lethbridge (Canada), 1994
M.E.Des., University of Calgary (Canada), 2000
Ph.D., Texas State University, 2006

Dr. Guang-Hwa (Andy) Chang
Professor of Mathematics and Statistics
Graduate Faculty Member
B.S., Natl. Taiwan Col of Marine Sc. and Tech., (China), 1981
M.S., Texas Tech University, 1987
Ph.D., Texas Tech University, 1993

Dr. Huaiyu (Peter) Chen
Associate Professor of Accounting and Finance
Graduate Faculty Member
B.A., Wuhan University, (China), 1997
Dr. Kyosung Choo  
Associate Professor of Mechanical, Industrial, and Manufacturing Engineering  
Graduate Faculty Member  
B.S., Handong Global University, 2005  
M.S., Korea Advanced Institute of Science and Technology, 2011  
Ph.D., Korea Advanced Institute of Science and Technology, 2011

Dr. Ronald K. Chordas  
Lecturer of Health Professions  
Graduate Faculty Member  
B.A., Youngstown State University, 1970  
M.S., Youngstown State University, 1977  
Ph.D., Kent State University, 1996

Joy Christiansen Erb  
Professor of Art  
Graduate Faculty Member  
B.F.A., Miami University, 2001  
M.F.A., Texas Woman's University, 2005

Susan Ann Clutter  
Associate Professor of Chemistry  
Graduate Faculty Member  
B.A., Clark University, 1995  
M.F.S., The George Washington University, 2002

Dr. Jeffrey T. Coldren  
Professor of Psychology  
Graduate Faculty Member  
B.A., Albright College, 1983  
M.A., University of Kansas, 1988  
Ph.D., University of Kansas, 1992

Dr. Kelly Colwell  
Assistant Professor of Health Professions  
Graduate Faculty Member  
B.S.A.S., Youngstown State University, 1999  
M.R.C., Youngstown State University, 2013  
Ed.D., Youngstown State University, 2017

Dr. Eleanor A. Congdon  
Associate Professor of History  
Graduate Faculty Member  
B.A., Williams College, 1988  
M.A., University of Minnesota, 1993  
Ph.D., University of Cambridge - Gonville and Caius College, 1997

Dr. Chester R. Cooper  
Professor of Biological Sciences  
Graduate Faculty Member  
B.S., University of Pittsburgh, 1979  
M.A., University of Texas, 1983  
Ph.D., University of Texas, 1989

Dr. Edward Comman  
Lecturer of Nursing  
B.S.N., Youngstown State University, 2008  
M.S.N., Kent State University, 2013  
D.N.P., University of Pittsburgh, 2017

Dr. Pedro Cortes  
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Graduate Faculty Member  
B.S., Inst. Tecnologico de Celaya (Mexico), 1997  
M.S., Inst. Tecnologico y de Estudios Superiores de Monterrey (Mexico), 2001  
Ph.D., University of Liverpool (UK), 2005

Dr. M. Kathleen L. Cripe  
Associate Professor of Teacher Education  
Graduate Faculty Member  
B.S., Youngstown State University, 1986  
M.S., Youngstown State University, 1998  
Ph.D., University of Akron, 2009

Dragana Crnjak  
Professor of Art  
Graduate Faculty Member  
B.F.A., University of Akron, 2002  
M.F.A., Virginia Commonwealth University, 2004

Courtney Cruz  
Lecturer of Teacher Education  
B.A., Mount Vernon Nazarene University, 2005  
M.S., Youngstown State University, 2014

Dr. Lauren Cummins  
Professor of Teacher Education  
Graduate Faculty Member  
B.S., Dyke College, 1978  
M.Ed., Kent State University, 1982  
Ed.D., Nova Southeastern University, 2000

Dr. Rebecca M. L. Curnalia  
Professor of Communication  
Graduate Faculty Member  
B.A., Olivet College, 2001  
M.A., Northern Illinois University, 2003  
Ph.D., Kent State University, 2007

Joseph D’Uva  
Associate Professor of Art  
B.F.A., The School of the Art Institute of Chicago, 1996  
M.A., University of Iowa, 2000  
M.F.A., University of Iowa, 2000

Dr. Ramesh Dangol  
Associate Professor of Management  
Graduate Faculty Member  
B.A., Middlebury College, 1997  
M.B.A., Ball State University, 2002  
Ph.D., Purdue University, 2012

Dr. Timothy J. Daugherty  
Lecturer of Mechanical, Industrial, and Manufacturing Engineering
B.E., Youngstown State University, 2014  
M.S., Youngstown State University, 2016  
Ph.D., Youngstown State University, 2020

Dr. Dana Davis  
Associate Professor of Social Work  
Graduate Faculty Member  
B.A., University of Maryland, 1992  
M.S.W., University of Pittsburgh, 1998  
Ph.D., Widener University, 2013

Maria Fenty Denison  
Lecturer of Theater and Dance and Music  
B.M., Westminster Choir College, 1986  
M.M., University of Miami, 1989  
D.M.A., University of Miami, 2012

Dr. Richard Albert Deschenes, Jr.  
Assistant Professor of Civil/Environmental and Chemical Engineering  
B.S., University of Arkansas, 2012  
M.S., University of Arkansas, 2014  
Ph.D., University of Arkansas, 2017

Laura J. Dewberry  
Senior Lecturer of Marketing  
B.S., John Carroll University, 2003  
M.B.A., Cleveland State University, 2006

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Professor of Mathematics and Statistics
Graduate Faculty Member
B.S., Youngstown State University, 2002
B.A., Youngstown State University, 2002
M.A., Kent State University, 2004
Ph.D., Kent State University, 2008

Dr. Gary R. Walker
Professor of Biology
Graduate Faculty Member
B.A., University of Colorado, 1977
Ph.D., Wayne State University, 1984

Dr. Jason Walker
Assistant Professor of Mechanical, Industrial, and Manufacturing Engineering
Graduate Faculty Member
B.S., Case Western Reserve University, 2010
Ph.D., University of Toledo, 2014

Dr. Darrell R. Wallace
Professor of Mechanical, Industrial, and Manufacturing Engineering
B.S.M.E., The Ohio State University, 1995
M.S.M.E., The Ohio State University, 1998
Ph.D., The Ohio State University, 2006

Donna Walsh
Senior Lecturer of Marketing
B.S., University of Akron, 1985
M.B.A., Youngstown State University, 2008

Dr. Alice M. Wang
Professor of Music
B.M., University of Southern California, 1998
M.M., Royal Conservatory of Music in Antwerp (Belgium), 2000
D.M.A, University of Texas at Austin, 2007

Dr. Yaqin Wang
Dr. Ying Wang  
Professor of Marketing  
Graduate Faculty Member  
B.A., People's University of China, 1993  
M.A., Kent State University, 1998  
Ph.D., Kent State University, 2006

Robert E. Wardle  
Associate Professor of Chemistry  
Graduate Faculty Member  
B.S., Youngstown State University, 1998  
M.S., Youngstown State University, 2007  
M.S., University of Florida, 2010

Dr. Amy Weaver  
Associate Professor of Nursing  
Graduate Faculty Member  
B.S.N., West Liberty University, 1994  
M.S.N., Youngstown State University, 2006  
Ph.D., Villanova University, 2013

Dr. Cary Wecht  
Professor of Communication  
Graduate Faculty Member  
B.A., Youngstown State University, 1989  
M.A., Kent State University, 1993  
Ph.D., Kent State University, 1999

Dr. Jane Wetzel  
Associate Professor of Physical Therapy  
Graduate Faculty Member  
B.A., Ohio Wesleyan University, 1975  
Certificate, University of Pittsburgh, 1976  
M.S., University of Southern California, 1987  
Ph.D., University of Pittsburgh, 2001

Dr. Amy E. Williams  
Assistant Professor of Psychology  
Graduate Faculty Member  
B.S.E., Lock Haven University, 2002  
M.S., University of Scranton, 2006  
M.Ed., College of William and Mary, 2013  
Ph.D., College of William and Mary, 2016

Dr. Eric J. Wingler  
Professor of Mathematics and Statistics  
Graduate Faculty Member  
B.S., Eastern Illinois University, 1974  
M.A., Eastern Illinois University, 1975  
Ph.D., University of Illinois, 1982

Dr. Mark D. Womble  
Professor of Biological Sciences  
Graduate Faculty Member  
B.S., Texas Christian University, 1975  
M.S., University of Kentucky, 1978  
Ph.D., University of Michigan, 1983

Dr. Peter Woodlock  
Professor of Accounting and Finance  
B.S.B.A., Youngstown State University, 1979  
M.S., The Ohio State University, 1990  
Ph.D., The Ohio State University, 1990

Dr. Sherri Harper Woods
B.A., Mercyhurst College, 1980  
M.B.A., Youngstown State University, 1993  

Dr. Yong Zhang  
Associate Professor of Computer Science and Information Systems  
Graduate Faculty Member  
B.S., Ocean University of QingDao (China), 1986  
M.S., Ocean University of QingDao (China), 1989  
M.S., University of South Florida, 2001  
Ph.D., University of South Florida, 2005  

Dr. Yiyang Zhang  
Assistant Professor of Accounting and Finance  
B.B.A., Washburn University, 2011  
M.Acc., University of Kansas, 2013  
Ph.D., University of South Florida, 2018  

Colleges & Programs  
The Beeghly College of Liberal Arts, Social Sciences, and Education  

Charles Howell, Dean  

The College grants four bachelor's degrees:  
• Bachelor of Arts (BA)  
• Bachelor of General Studies (BGS)  
• Bachelor of Science in Education (BSED)  

Additionally, an Associate of Arts (AA) degree is offered and an Associate of Applied Science (AAS) in Early Childhood Associate/Pre-Kindergarten.  

Mission  
The Beeghly College of Liberal Arts, Social Sciences, and Education prepares students for productive and rewarding lives by developing critical and creative thinking, sound judgment, and effective communication skills. Through its rigorous and engaging programs, the College affirms the richness of ethnic, cultural, gender, and racial differences and promotes global, national and regional perspectives. The College cultivates knowledge of the liberal arts, social sciences, and the education disciplines to produce well-rounded citizens who value learning and to prepare students for careers and for advanced graduate and professional study.  

Academic Departments  
• Department of English and World Languages  
• Department of Humanities and Social Sciences  
• Department of Psychological Sciences and Counseling  
• Department of Teacher Education and Leadership Studies  

Academic Programs  
• Africana Studies  
• American Studies  
• Global Education  
• Islamic Studies  
• Judaic and Holocaust Studies  
• Peace and Conflict Studies  
• Women's and Gender Studies  
• Working-Class Studies  

Programs For the BA Degree  
• Anthropology  
• English  
• Geography  
• History  
• Italian  
• Philosophy  
• Political Science  
• Professional and Technical Writing  
• Psychology  
• Religious Studies  
• Sociology  
• Spanish  

Programs For the BGS Degree  
• General Studies  

Programs For the BSED Degree  
• Primary/Primary Intervention Specialist (Grades PK – 5) - Pending State Approval  
• Middle Childhood Education (Grades 4 – 9)  
• Adolescent Young Adult (Grades 7-12)  
  • Integrated Language Arts  
  • Integrated Mathematics  
  • Integrated Science  
  • Integrated Social Studies  
• Multi-Age License (Grades PK – 12)  
  • Italian Education  
  • Spanish Education  
• Intervention Specialist (Grades K-12)  
  • Mild/Moderate Disabilities  

Programs For the AAS Degree  
• Early Childhood Associate/Pre-Kindergarten  

Endorsements  
• Early Childhood Generalist (Grades 4-5)  
• Middle Childhood Generalist (Grades 4-6) - Language Arts, Math and Science Only  
• Reading (Grades K-12) – Graduate Level Only  
• TESOL (Grades K-12)  

Minors  
Minors are available in all program areas with many programs offering multiple and/or interdisciplinary minors. Students wishing to pursue a minor should consult the list of official minors and seek advisement in the department that houses the minor. Minors consist of at least eighteen (18) semester hours, and one-third of the hours must be upper-division. Minors are not required for students enrolled in a Teacher Education program. In approved interdisciplinary minors, courses from the student’s major discipline can be counted in the minor provided that the same courses are not counted toward the major.  

Certificates  
Certificate programs are offered in historic preservation, applied gerontology, geospatial science and technology, and comparative international studies.
ICP Program

Students whose needs are not met by existing conventional programs may wish to investigate and apply for the Individualized Curriculum Program (see Special Academic Programs).

Accreditation

Youngstown State University teacher education programs are accredited by the Ohio Department of Education and the Council for the Accreditation of Educator Preparation (CAEP). These programs are subject to the sections of the Ohio law and regulations governing teacher education and licensure. The Beeghly College of Liberal Arts, Social Sciences, and Education serves as the recommending agent for all Youngstown State University graduates who wish to qualify for state of Ohio licensure as well as for licensure in other states.

Degree Requirements

Degree Requirements

Requirements for completion of a baccalaureate degree (BA, BGS, BSED) within the Beeghly College of Liberal Arts, Social Sciences, and Education include all University requirements detailed in the Academic Policies and Procedures section of the Undergraduate Catalog (i.e., requirements regarding total General Education Requirements, university credits, course levels, majors, and minors, grade point average, residency and degree applications). Specific requirements for each major in the Beeghly College of Liberal Arts, Social Sciences, and Education are listed by department.

College Foreign Language Requirement for Bachelor's Degree

All candidates for the BA degree are required to demonstrate proficiency at the 2600 level (two semesters) in any foreign language. Students with a foreign language background may desire to take the foreign language placement test in order to place into the second semester (2600) or beyond (which will satisfy the foreign language requirement). It may be possible to satisfy the foreign language requirement through appropriate college transfer coursework and credit by exam.

Courses of Instruction and Curricula

In the following department sections, the course requirements for the various majors are given, but other requirements are not repeated from the list above.

Course descriptions can be found in a separate section of the Undergraduate Catalog.

For more information, visit the Beeghly College of Liberal Arts, Social Sciences, and Education.

 Majors in Teacher Education

The Department of Teacher Education and Leadership Studies offers teaching licenses in the following areas:

- **Primary/Primary Intervention Specialist Education** (Pre-kindergarten through grade five). (Pending State Approval) The successful candidate will teach children who are typically developing, at-risk, gifted, or who have mild/moderate educational needs in the P-5 classroom. This classroom can be a general education, full inclusion, or special education classroom, or a resource room.
- **Middle Childhood Education** - (Grades four through nine). The successful candidate will teach learners in at least two of four curriculum concentration areas named on the teaching license including:
  - Language Arts
  - Mathematics
  - Science
  - Social Studies

- **Adolescent Education** - (Grades seven through twelve). The successful candidate will teach learners in one of the following curriculum areas named on the teaching licence including:
  - Integrated Sciences Education
  - Integrated Language Arts Education
  - Integrated Mathematics Education
  - Integrated Social Studies Education
- **Multi-age Education** - (Pre-kindergarten through grade twelve). The successful candidate will teach learners in one of the following curriculum areas named on the teaching license including:
  - Italian Education (See Department of English and World Languages for more information)
  - Spanish Education (See Department of English and World Languages for more information)
  - Music Education (See Department of Music for more information)
- **Special Education** - (Intervention specialist, kindergarten through grade twelve). For teaching learners with Mild/Moderate Disabilities.

Requirements for Admission to Teacher Education Licensure Programs

Neither admission to the University nor declaration of a major related to a teaching field guarantees admission to the teacher education programs or candidacy for a teaching license. **Formal admission to teacher education is required before students are allowed to enroll in junior and senior level courses in their major.**

After candidates have completed a minimum of 50 semester hours and fulfilled all other admission requirements, they must submit an application for admission to the teacher education program (Upper Division). The application for Upper Division must be completed and submitted to Beeghly Hall Room 2101 by:

- September 1st to register for Upper Division courses for Spring;
- February 1st to register for Upper Division courses for Summer and Fall.

Students who submit an application after the deadline are NOT guaranteed acceptance in time to register for Upper Division courses.

Each completed application will be reviewed and approved by the Upper Division Admission and Retention Committee. If all requirements are met, student will be allowed to register for Upper Division courses the following semester.

Admission to the Teacher Education Program (upper division) is obtained upon satisfactory completion of the following requirements:

- Minimum completion of 50 semester hours
- Minimum 2.75 overall GPA
- Competency in Reading, Writing, and Math

AND

ACT - Reading 21, English 18, Math 22 OR
SAT - Reading 450, Writing 430, Math 520 OR
Praxis Core - Reading 156, Writing 162, Math 150

- **ENGL 1550 Writing 1 and ENGL 1551 Writing 2 "B" average or better OR ENGL 2601 Intermediate Writing for Teachers "B" or better
- EDFN 1501 Introduction to Education, CMST 1545 Communication Foundations, SPED 2630 Individuals with Exceptionalities in Society and a content course (see curriculum sheet for content area course) "B" average or above
- Completion of Good Moral Character Statement
Candidates for degrees outside of the Department of Teacher Education and Leadership Studies (Spanish, Italian, Music, or Art) are enrolled in the college awarding the particular degree; however, these students must meet the above requirements and be admitted to upper division in Department of Teacher Education and Leadership Studies (TELS) in order to enter the junior and senior level courses leading to a teaching license.

Students should meet the requirements for admission to teacher education by the end of their sophomore year. Later qualification does not justify waiving any course prerequisites or planned sequences, and usually results in prolonging the period of study beyond the usual four years.

**Graduation and/or Licensure Evaluation**

A Request for Graduation and/or Licensure Evaluation form should be completed and submitted to Beeghly Hall Room 2101 one year prior to student teaching and/or application for licensure. This form generates a program evaluation to assure that the student meets graduation and/or licensure requirements.

**Requirements for Student Teaching**

Application for a student teaching must be filed with the Department of TELS, Advisement Office, Beeghly Hall Room 2101 during the preceding semester in which student teaching is to be completed. Teacher candidates must register for 10 hours of student teaching and two hours for the student teaching seminar in their licensure area. Students anticipating more than one teaching license should seek advisement in BCLASSE, Beeghly Hall Room 2101. To qualify for a student teaching assignment, the student must have satisfied the following requirements:

1. BCLASSE Upper Division Status
2. a minimum overall G.P.A. of a 2.75
3. completion of the program prerequisites
4. an average of 2.67 in the major/teaching area and professional education courses (each computed separately with no grade less than a C)
5. a passing score on the Ohio Assessment for Educators (OAE) tests and/or the equivalent as required by the Ohio Department of Education
6. completion of a criminal background check

No additional courses may be taken with student teaching. The Administrator of Student Field Experiences must be notified in writing prior to a student's attempt to register for course(s) outside of student teaching. Teacher candidates are required to complete, submit for national scoring, and pass the edTPA, Teacher Performance Assessment. The Department of TELS requires the passage of the edTPA with a minimum score of 37 (32 for Foreign Language) as one of the requirements for licensure. Student teaching may deviate from the University calendar depending on the academic calendar of the assigned school.

**Requirements for Licensure**

**Initial Licensure**

The Dean of BCLASSE has the authority to recommend to the Ohio State Board of Education, and other licensure agencies, those Youngstown State University graduates who qualify for licensure in any teacher education program offered by the University. Students earning degrees through other colleges must complete all requirements of the teacher education program in order to be licensed. All candidates for any teaching license must meet the requirements for program admission in TELS, but the degree earned may be conferred by any of the University colleges in accordance with the specific requirements for the degree desired.

However an overall undergraduate grade point average of 2.75 and 2.67 in the major field(s) and professional-education courses must have been earned if the student is to be recommended for licensure by Youngstown State University, irrespective of the type of degree received. **In addition, each candidate for licensure must pass the State of Ohio prescribed licensing examination(s) Ohio Assessments for Educators, ACTFL (foreign language) and the Teacher Performance Assessment (edTPA) prior to receiving YSU's recommendation for licensure.**

For more information regarding additional fields, or endorsements, consult the academic advisors in BCLASSE, Beeghly Hall Room 2101.

**Post-Baccalaureate Licensure**

Post-baccalaureate students desiring Youngstown State University’s recommendation for licensure in Ohio and any other state must be admitted to the University. Post-baccalaureate students are advised in the undergraduate student advisement office (Beeghly Hall Room 2101) and are advised in the same manner as undergraduate students. They must meet the standard set of requirements for admission and upper-division status in BCLASSE. They must satisfy the teaching field, and professional education requirements comparable to the undergraduate program. Post-baccalaureate students may use approved, documented program equivalency to satisfy appropriate parts of the licensure program.

**Licensure in a Second Teaching Field**

Post-baccalaureate and undergraduate students seeking licensure in a second teaching field will need to satisfy the approved academic program as stated in the catalog under the section “Teaching Fields.” The same quality point requirements apply to second teaching fields as those for initial licensure. A passing score on the specialty exam of the State of Ohio for the second teaching field is required prior to YSU’s recommendation for the second teaching field.

**Advisement**

All prospective teachers are advised by the academic advisors in BCLASSE, Beeghly Hall. Secondary students, middle childhood students, and multi-age students are also advised in the department in which their major or areas of concentration are located.

**Title II, Higher Education Act**

Please click here for the Institutional Report on the Quality of Teacher Preparation, Title II, Higher Education Act.

**Curricula and Courses of Instruction**

Each curriculum leads to an Ohio resident educator license. Minimum requirements for teachers’ licenses are determined by the Ohio Department of Education; if those requirements change, they become effective immediately at Youngstown State University. State department minimal requirements may be, and usually are, exceeded by University requirements.

**Disclaimer:** Educator Licensure tests and qualifying scores listed in the ODE charts and on the ODE website are subject to change by the Ohio State Board of Education.

For more information, visit The Beeghly Co (http://www.ysu.edu/academics/beeghly-college-education/) College of Liberal Arts, Social Sciences and Education.

**Department of Counseling, School Psychology and Educational Leadership**

**Welcome**

Youngstown State University is located an hour from Cleveland and Pittsburgh. The Department of Counseling, School Psychology and Educational
Leadership develops professionals who are committed to empowering individuals to achieve their full potential.

The mission of the Department of Counseling, School Psychology and Educational Leadership is to develop professional counselors, school psychologists, and related helping professionals. We seek to produce graduates who are sensitive to the impacts of human development, culture, and context upon students and consumers of education and counseling services. Graduates are caring and compassionate administrators, counselors, and helping professionals; who are self-reflective; who promote opportunity and social justice for the impoverished urban and rural populations; and, who are committed to empowering individuals to thrive, and to achieve their fullest potential.

We offer several graduate degree programs. The CACREP accredited masters degree in Counseling has options in a) Clinical Mental Health Counseling, b) School Counseling, c) Addiction Counseling, and d) College Counseling & Student Affairs. The educational specialist degree in School Psychology includes a master’s degree in Intervention Services. An ELCC approved masters degree in Educational Administration and doctoral degree in Educational Leadership. Post-masters program coursework can lead to licensure as a principal, superintendent, or administrative specialist.

The faculty and students within the Department of Counseling, School Psychology and Educational Leadership are committed to academic success, excellence, and engagement. The department has a consistent record of accomplishments in relation to the mission and goals of YSU, assessment activities/results, research and scholarly activity by faculty and students, examples of student success and academic excellence, and community engagement activities.

Jake J. Protivnak, Ph.D.
Department Chairperson / Professor
4103 Beeghly College of Education
(330) 941-1936
jjprotivnak@ysu.edu

For more information about the Department of Counseling, School Psychology and Educational Leadership, contact the Department Office at 330-941-3257 or visit our Department website.

undergraduate course Work Areas

Counseling

The counseling program offers a limited number of undergraduate elective courses for students who are interested in developing counseling knowledge and skills and/or pursuing a graduate degree in counseling. The undergraduate counseling courses focus on mental health and wellness, leadership, career/life planning, and helping skills. The counseling program offers an MS in Education degree with program options in clinical mental health counseling, school counseling, addiction counseling, college counseling & student affairs. Candidates are prepared to meet the requirements for the applicable licensure and certifications. A complete list of program options and course descriptions are presented in the YSU Graduate Catalog and on the department’s website.

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
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<tbody>
<tr>
<td>COUN 1587</td>
<td>Introduction to Health and Wellness in Contemporary Society</td>
<td>3</td>
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<tr>
<td>COUN 1588</td>
<td>Exploring Leadership: Theory and Practice</td>
<td>3</td>
</tr>
<tr>
<td>COUN 1589</td>
<td>Success in Career and Life Planning</td>
<td>3</td>
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<tr>
<td>COUN 2650</td>
<td>Foundations of Helping Skills for Allied Health Professionals</td>
<td>3</td>
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<tr>
<td>COUN 2651</td>
<td>Foundations of Helping Skills for Human Ecology Professionals</td>
<td>2</td>
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</tbody>
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Counseling

COUN 1587  Introduction to Health and Wellness in Contemporary Society  3 s.h.
Provides an introduction to the wellness model integrating physical, mental, and emotional well-being. Using current research, students explore decision-making models examining ethical, theoretical, multicultural, and practical concerns in developing their own wellness strategies.


COUN 1588  Exploring Leadership: Theory and Practice  3 s.h.
Introduction to the study of leadership through theoretical and practical applications. Through group interaction, discussions, and change projects, students will develop their leadership knowledge while acquiring skills to solve leadership challenges within diverse organizations. The course will provide students with intellectual and interpersonal opportunities to practice the process of becoming effective leaders.

COUN 1589  Success in Career and Life Planning  3 s.h.
The course will facilitate the development of career and life planning skills. This course is designed for, but not restricted to, entering and undeclared students. This course will emphasize identifying strengths, clarifying values, exploring career options, developing effective decision-making skills, and learning life skills related to health, finances, relationships, and community responsibility.

COUN 2650  Foundations of Helping Skills for Allied Health Professionals  3 s.h.
Skill development in learning how to foster helping relationships and increase communication skills with individual, family, or group-related patient needs in a health care setting. Emphasis on ethical, cultural, socioeconomic, and special needs in allied health care settings. Includes an experiential skill video training component.

COUN 2651  Foundations of Helping Skills for Human Ecology Professionals  2 s.h.
The course will facilitate the development of helping skills with individual, family and/or groups. Emphasis is on ethical, cultural, socioeconomic, and special needs in human service settings. Courses will include overview of counseling skills and theories that will assist students to address client care needs.

COUN 5821  Seminar in Guidance and Counseling  1-3 s.h.
Study of selected topics chosen by staff, e.g. career guidance, counseling process, and other contemporary issues in school personnel work. 
Prereq.: Upper-division standing.

COUN 5822  Seminar in Guidance and Counseling  1-3 s.h.
Study of selected topics chosen by staff, e.g. career guidance, counseling process, and other contemporary issues in school personnel work. 
Prereq.: Upper-division standing.

COUN 5823  Career Education and Career Guidance  2 s.h.
Study of public school career education and career guidance programs; the career education continuum, legislation relating to vocational programs, historical development, and principles of vocational education and vocational guidance. Also a survey of economic services: distributive education, human resources, programs, and placement. 
Prereq.: Upper-division standing.

COUN 5825  Group Processes in the School  2 s.h.
An introduction to group activities applicable to the needs of students in the school setting. Includes the study of group processes and group dynamics for social and personal problem solving as well as in the general area of individual and group behavior. Also a study of programs that provide for counselor-teacher cooperation in the development of groups in the classroom. 
Prereq.: Upper-division standing.

COUN 5879  Talented Students and Their Families  3 s.h.
A study of consulting and referral practices related to the developmental, social and personal difficulties often experienced by gifted/talented students and their families. Includes a field study component. 
Prereq.: Upper-division standing.
COUN 5888  Introduction to Health and Wellness Counseling  3 s.h.
Provides an introduction to basic counseling principles with special focus on those factors encountered in the provision of health and wellness-related services.
Prereq.: Upper-division standing.

COUN 5895  Counseling Workshop  1-3 s.h.
Selected topics related to prevention and intervention approaches in school and community settings. Designed primarily as continuing professional education, this course is not included in counseling degree programs.
Prereq.: Upper-division standing.

COUN 5898  Orientation and Ethical Issues in Community Counseling  3 s.h.
This course provides students with an introduction to the field of professional counseling and the foundations of community counseling. The course addresses the following topics: history, philosophy, cultural dynamics, advocacy, consultation, technology applications, and trends in professional and community counseling. The counseling profession's ethical standards are also addressed with an emphasis on the ACA code of ethics and counselor ethical decision making processes. Requirements differ for undergraduate and graduate students.

Department of Teacher Education and Leadership Studies
Dr. Marcia Matanin, Chairperson
Office: BCOE 1101
Office Phone: (330) 941-3251
Administrative Assistant: Jean Berger
Email Address: jberger@ysu.edu

Mission
The mission of the Department of Teacher Education and Leadership Studies is to prepare teachers and administrators who provide quality instruction and leadership in an environment designed to meet the needs of diverse learners, and to assist them in developing 21st century skills.

Programs
Primary/Primary Intervention Specialist Education Grades P-5 (Pending State Approval)

• For teaching children who are typically developing, at-risk, gifted, and who have mild/moderate educational needs in the general education classroom.
• For teaching children with physical, cognitive, behavioral or communication delays. Early intervention specialists can work inside a P-3 classroom, provide individual services to children within their homes, work with regionally based programs, medical providers or private education companies.

Middle Childhood Education (MCE) Grades 4-9

• For teaching learners in at least two of four curriculum concentration areas named on the teaching license. Students choose two areas from the following four: Language Arts Education, Mathematics Education, Science Education, and Social Studies Education

Adolescent/Young Adult Education (AYA) Grades 7-12

• For teaching learners in a curriculum area named on the teaching license. Students may choose from: Integrated Sciences Education, Integrated Language Arts Education, Integrated Mathematics Education, or Integrated Social Studies Education

Intervention Specialist Grades K-12

• For teaching learners with mild/moderate disabilities, grades K-12

Multi-Age Education (MULT) Grades PK-12

• For teaching in a curriculum area named on the teaching license. Students may choose from: Music Education, Visual Arts Education (please refer to The Cliffe College of Creative Arts (p. 255) for these program areas), Italian Education and Spanish Education

Early Childhood Associate Pre-K

• For teaching children in the pre-K classroom. Curriculum includes early childhood development, classroom management and building parent/professional relations. This program leads towards licensure to teach in daycare and preschool programs.

Endorsements (Endorsements may be added to a teaching license)

• Early Childhood Generalist Endorsement Grades 4-5
• Middle Childhood Generalist Endorsement (Language Arts, Mathematics, Science)
• Teaching English to Speakers of Other Languages (TESOL) Endorsement

Minors

• Education Minor: Students majoring in a program other than Education may select an Education minor. Please contact a BCOE academic advisor for more information.

Reading and Study Skills
The Department offers undergraduate Reading and Study Skills courses for students who are interested in improving reading and skills.

Course List

• RSS 1510A Advanced College Success Skills 3 semester hours
• RSS 1510B Basic College Success Skills 3 semester hours
• RSS 1510C STEM Advanced College Success Skills 4 semester hours

Accreditation
The Beeghly College of Education received accreditation from the Council for Accreditation for Educator Preparation (CAEP) in Spring 2017. Additionally, Youngstown State University Teacher Education programs are fully approved by the Ohio Department of Higher Education and many are recognized by their respective Specialized Professional Associations (SPAs).

Chair
Marcia Matanin, Ph.D., Professor, Acting Chair
Professor
Margaret L. Briley, Ph.D., Assistant Professor
Jeffrey M. Buchanan, Ph.D., Professor
M. Kathleen L. Cripe, Ph.D., Associate Professor
Lauren Cummins, Ed.D., Professor
Pam Epler, Ph.D., Assistant Professor
Stacy Graber, Ph.D., Associate Professor
Charles Howell, Ph.D., Professor
Daniel Keown, Ph.D., Associate Professor
Mary E. LaVine, Ph.D., Associate Professor
Early Childhood Education

ECE 3713 Teaching of Mathematics: Early Years 3 s.h.
Using NCTM/NAEYC/NCATE and Ohio Model guidelines as the framework, focus on identifying and modeling developmentally appropriate strategies used for problem solving, communicating, and reasoning in early childhood mathematics. Learning to use mathematical connections to stimulate diverse students’ development of math concepts and skills and create learning environment combining mathematics pedagogy/methodology in an early grades classroom.
Prereq.: BCOE upper-division status and approval of chair.
Coreq.: ECE 3715, ECE 3780, and ECE 4814.

ECE 3715 Teaching Science: Early Years 3 s.h.
Using NSTA/NCATE and Ohio Model guidelines as the framework, focus on establishing and maintaining learning environments that provide diverse students with a holistic, interdisciplinary understanding of science. Topics include teaching for meaningful science understanding, planning and providing an effective and supportive learning environment, planning and implementing curriculum and lessons appropriate for children in their early years, selection and use of instructional aids and resources, assessment, and professional development. Experiences that promote the use of science processes and problem-solving skills for life-long learning. Field experience combining science pedagogy/methodology in an early childhood setting.
Prereq.: BCOE upper-division status and approval of chair.
Coreq.: ECE 3713, ECE 3780, and ECE 4814.

ECE 3780 Social Studies for Young Children 3 s.h.
Methods of teaching social studies to young learners (PreK-3) including exploration of a variety of effective teaching and assessment behaviors related to diverse learner needs. Use of key concepts, application of tools of social studies to foster social development and encourage independent problem solving, investigate the use of technology, create instructional resources; collaboratively plan, teach, and evaluate lessons in inclusive instructional settings; keep a reflective learning log.
Prereq.: BCOE upper-division status and approval of chair.
Coreq.: ECE 3713, ECE 3715, and ECE 4814.

ECE 3790 Assessing Learning in Early Childhood Education P3 3 s.h.
This course examines the theoretical foundations and developmentally appropriate assessment strategies in a P-3 classroom. Candidates will explore a variety of informal, formal, formative and summative classroom assessment strategies and critically investigate standardized assessments used in the current national and state movements toward accountability and “high-stakes” assessment. This course is a required part of the TEC experience to provide candidates with an authentic classroom assessment experience.
Prereq.: ECE 3760.

ECE 4814 Language Arts Methods in the Early Years (Ages 3-8) 3 s.h.
Teaching oral and written communication through consideration of listening, speaking, reading, viewing, and related skill areas in the elementary school.
Prereq.: BCOE upper-division status and approval of chair.
Coreq.: ECE 3713, ECE 3715, and ECE 3780.

ECE 4841 Supervised Student Teaching: Early Childhood 1-10 s.h.
Sixteen week supervised clinical teaching experience in licensure area. Provides candidate with opportunities to apply knowledge and skills, and display dispositions needed to effectively teach in diverse classrooms. Grading is CR/NC.
Prereq.: BCOE Upper-Division Status with a minimum overall GPA of 2.75, passing scores on OAE tests prior to the start of the student teaching semester, criminal background check, and successful completion of respective preclinical experience, with minimum content GPA of 2.67 and professional education GPA of 2.67.
Coreq.: ECE 4842 and/or ECIS 4842.
Gen Ed: Capstone.
ECE 4842  Student Teaching Seminar in Early Childhood Education  2 s.h.
Student Teaching seminar provides an opportunity to study relevant topics
related to teaching and learning, application of professional and ethical
practice and OSTP standards, research and theory, knowledge of learners, and
reflection on practice. Completion of edTPA is required. CR/NC. Corequisites
ECE 4841 and/or ECIS 4841.
Prereq.: BCOE Upper-Division Status; Admission to Student Teaching in
Early Childhood Education or Early Childhood/Early Childhood Intervention
Specialist.

ECE 6910  Curriculum, Theories, and Methods in Early Childhood Education, Pre-K-Grade 3  3 s.h.
Investigation of curriculum, theories, and assessment and how they relate to
children’s learning. Attention given to the role of parents as teachers.

ECE 6911  Early Childhood Pedagogy in Math and Science  4 s.h.
By exploring math and science teaching practice for grades K-3, the candidates
will review teaching methods of math and science, find and design math and
science programs and lessons, incorporate national and state standards
in teaching math and science, and strengthen the assessment methods
for classroom instruction. This course is linked to ECE 6921 in terms of
an action research to solve real problems in teaching math and science for the
participating teachers.

ECE 6920  Current Social Issues in Early Childhood Education  3 s.h.
Analysis of contemporary issues, trends, and current educational policies that
impact classroom practices. Includes service-learning component.
Prereq.: ECE 6910 or ECE 6911.

ECE 6921  Action Research in Early Childhood Education, Pre-K-Grade 3  3 s.h.
Designed as a culminating experience. Direct participation is required for the
successful completion of a field study, onsite project, or other classroom-
Based experience deemed suitable by the student’s major faculty advisor.
Prereq.: ECE 6911 and FOUN 6904.

Early Childhood Intervention Specialist

ECIS 2600  Educating the Whole Child  3 s.h.
This course is designed to provide teacher candidates with the knowledge
and skills needed to educate the whole child. A balanced approach is studied
which includes a strong foundation in core subjects in addition to the whole
child tenets of: healthy, safe, engaged, supported, and challenged.

ECIS 2629  Best Practices in ECIS  3 s.h.
This course provides teacher candidates with a research-based inquiry into
early childhood education and promotes the acquisition of knowledge, skills,
and dispositions in candidates that will facilitate best practices within the
field. Field Hours Required.
Coreq.: TCED 1509.

ECIS 3700  Integrated Strategies in ECE/ECIS Inclusive Environments  4 s.h.
This course examines developmentally appropriate teaching practices
in a PK-3 inclusive classroom. Candidates will explore the concepts of
differentiation, integration, universal design, IEPs and classroom designs,
along with schedules that support learning for all students. Field Hours
Required.
Prereq.: BCOE Upper-Division Status- ECIS 2629, SPED 3715.
Coreq.: CHFM 3733L.

ECIS 3790  Assessing Learning in Early Childhood Education PK3  3 s.h.
This course examines the theoretical foundations and developmentally
appropriate assessment strategies in a PK-3 classroom. Candidates will
explore a variety of informal, formal, formative and summative classroom
assessment strategies and critically investigate standardized assessments
used in the current national and state movements toward accountability and
“high-stakes” assessment. This course is a required part of the preclinical
experience to provide candidates with an authentic classroom assessment
experience. Field hours required.
Prereq.: BCOE Upper-Division Status.

ECIS 4801  Teaching of Language Arts and Social Studies: The Early Years  4 s.h.
Candidates focus on identifying and modeling developmentally appropriate
strategies used for problem solving, communicating, and reasoning in early
childhood language arts and social studies. Candidates create effective
learning environments using content-specific pedagogy to make connections
to stimulate students’ development of language arts and social studies
concepts and skills in a diverse PK-3 classroom. Field hours Required.
Prereq.: BCOE Upper-Division Status, ECIS 3700, TERG 3703, MATH 2652.
Coreq.: ECIS 4802, ECIS 3790.

ECIS 4802  Teaching of Mathematics and Science: The Early Years  4 s.h.
Candidates focus on identifying and modeling developmentally appropriate
strategies used for problem solving, communicating, and reasoning in early
childhood math and science. Candidates create effective learning
environments using content-specific pedagogy to make connections to
stimulate students’ development of math and science concepts and skills in a
diverse PK-3 classroom. Field hours Required.
Prereq.: BCOE Upper-Division Status, ECIS 3700, TERG 3703, MATH 2652.
Coreq.: ECIS 4801, ECIS 3790.

ECIS 4841  Supervised Student Teaching: ECE/ECIS  1-10 s.h.
Sixteen week supervised clinical teaching experience in licensure area.
Provides candidate with opportunities to apply knowledge and skills, and
display dispositions needed to effectively teach in diverse classrooms. CR/NC.
Prereq.: BCOE Upper-Division Status with a minimum overall GPA 2.75,
passing scores on OAE tests prior to the start of the student teaching
semester, criminal background check, and successful completion of preclinical
experience with minimum content of GPA 2.67, and professional education
GPA of 2.67.
Coreq.: ECIS 4842, ECE 4841.

ECIS 4842  Student Teaching Seminar in ECE/ECIS  2 s.h.
Student teaching seminar provides an opportunity to study relevant topics
related to teaching and learning, application of professional and ethical
practice and OSTP standards, research and theory, knowledge of learners, and
reflection on practice. Completion of the edTPA is required. CR/NC.
Prereq.: BCOE Upper-Division Status; Admission to Student Teaching in Early
Childhood/Early Childhood Intervention Specialist Program.
Coreq.: ECE 4841, ECIS 4841.

Early and Middle Childhood Education

EMCE 5801  Early Childhood Generalist Science  2 s.h.
By exploring science teaching practices and technologies for grades 4-5,
the candidates will review teaching methods of science, master the content
stated in the Ohio Academic Learning Standards, find and design science
programs and lessons, incorporate the national and state standards in
teaching science, and strengthen the assessment methods for the science
classroom instruction.

EMCE 5802  Early Childhood Generalist Math  2 s.h.
By exploring math teaching practices and technologies for grades 4-5,
the candidates will review teaching methods of mathematics, and master the content
stated in the Ohio 2017 Learning Standards for Mathematics, and the Common Core Standards for Mathematics.

EMCE 5803  Early Childhood Generalist Language Arts  2 s.h.
Candidates will learn language arts content and teaching methods, design
integrated lessons, incorporate state and national standards, and utilize
assessment methods for grades 4-5.

EMCE 5804  Early Childhood Generalist the Arts, Health and Fitness  1 s.h.
Knowledge and application of the Arts, Health, and Fitness related to teaching
practice for grades 4-5. Candidates will review content and methods of
teaching the Arts, Health, and Fitness content as stated in the Ohio Academic
Content Standards. Instruction on pedagogical strategies to include these
content areas in the 4-5 curriculum.
EMCE 5805 Early Childhood Generalist Social Studies 2 s.h.
Candidates will learn social studies content, teaching methods, design integrated lessons, incorporate state and national standards, and utilize assessment methods for grades 4-5.

EMCE 5900 Early/Middle Childhood Education Workshop 1-4 s.h.
Intensive study of selected topics, issues, or problems of current interest in early and/or middle childhood education. Grading is S/U. May be repeated.

EMCE 5903 Early/Middle Childhood Education Workshop 1-4 s.h.
Intensive study of selected topics, issues, or problems of current interest in early and/or middle childhood education. Grading is S/U. May be repeated.

EMCE 6990 Independent Study 1-4 s.h.

Educational Foundations
EDFN 1501 Introduction to Education 3 s.h.
Historical, political, legal, cultural and ethical perspectives on the work and roles of teachers and schooling. Issues confronting educators, voters, parents and children. Observe the organization and governance of school districts. Field hours required.

EDFN 3708 Education and Society 3 s.h.
School as a dynamic social institution. An analysis of how schools interact with diverse communities and with social, political, and cultural institutions and traditions. Field hours required.
Prereq.: Fifty semester hours.

EDFN 3710 Educational Assessment 3 s.h.
Critical review of types, purposes, procedures, uses, and limitations of assessment strategies and techniques including authentic assessment, value-added assessment, and alternate assessment. Standardized testing and implications for current practice.
Prereq.: Upper Division.

Foundations of Education
FOUN 5875 Seminar in Foundations of Education 1-3 s.h.
Selected topics for a focused study on problems, issues, or concerns to be addressed by a sociological, historical, philosophical, assessment, or research perspective.
Prereq.: Permission of chairperson.

FOUN 5880 Special Topics in Foundations of Education 1-3 s.h.
An advanced study of sociological, historical, and/or philosophically based research which provides analysis of a particular educational issue with special emphasis on implications for diverse populations and/or diverse school settings.
Prereq.: Permission of chairperson.

Health Education Physical Education
HEPE 1567 Performance and Analysis of Invasion Games 3 s.h.
Analysis, performance, content and strategy development, teaching, and assessing of invasion games (basketball, football, soccer, team handball, rugby, ultimate frisbee, field hockey, floor hockey, and lacrosse). Two hour lecture, two hour lab.

HEPE 1574 Performance and Analysis of Target and Fielding Games 3 s.h.
Analysis, performance, content and strategy development, teaching, and assessing of target and field games (golf, bowling, softball, cricket and other lifetime activities). Two hour lecture, two hour lab.

HEPE 1575 Performance and Analysis of Net and Wall Games 2 s.h.
Performance and Analysis of performing and strategies for teaching/coaching and assessing net/wall games (badminton, pickleball, tennis, racketball, volleyball and other net/wall games. One hour lecture, two hours lab.

HEPE 1579 Rhythmic Movement for Children 1 s.h.
Content and teaching strategies related to rhythmic movement for children grades PreK-4. Rhythmic movement skills and concepts explored to provide successful dance experiences for children. One hour lecture, one hour lab.
Prereq.: Physical education major.

HEPE 2610 Introduction to Outdoor Pursuits 3 s.h.
Introduction to outdoor education including participation in initiatives, cooperative, orienteering, hiking, high and low ropes, and water based outdoor pursuits. Focus on activities to challenge by choice. One hour lecture, two hour lab.

HEPE 2624 Physical Education for Children in Early Childhood Settings 3 s.h.
Principles, methods, materials, and organization of activities for preschool-grade 3 children. Active participation, approximately 15-20 hours field work in area preschools/schools.
Prereq.: 30 hours.

HEPE 2628 Movement for Early Childhood 3 s.h.
Movement education approach to teaching fundamental movement patterns, educational dance, gymnastics, games, and creative activities for grades PreK-3. Two hours lecture, two hours lab. 20 hours field experience required.
Prereq.: Physical Education major.

HEPE 2650 Ethics in Sport and Coaching 2 s.h.
An introduction to ethics in sport, exploring ethical issues in relation to coaching K-12 student athletes. Skills related to exploring ethical dilemmas and ethical decision making. Discussion of District, State and National policies related to ethics.

HEPE 2672 Mechanical Principles of Movement 3 s.h.
Knowledge and methods of mechanical concepts as they relate and apply to the structure and function of human movement. Muscular structure and function in relation to physical movement, analysis of fundamental human movements. Includes the physical characteristics of the human body and applicable principles of mechanical physics. Two hours lecture. Two hours lab.
Prereq.: BIOL 1552, BIOL 1552L or BIOL 1545, BIOL 1545L.

HEPE 2689 Scientific Basis of Fitness 3 s.h.
Introduction to components of fitness and their physiological basis. Role of exercise and physical activity in the life of the P-12 learner. Application of training principles and participation in a variety of fitness activities. Introduction to physical fitness assessment. Two hour lecture, two hour lab.
Prereq.: Physical Education major and PHLT 1568.

HEPE 3702 Health Education Theory and Methods 4 s.h.
Theory, curriculum and methods for teaching health education in P-12 classroom. Provides both content and pedagogical knowledge. 3 hour lecture and 2 hour lab. 20 hours field experience required.
Prereq.: PHLT 1568.
Concurrent with: HEPE 3767.

HEPE 3715 Teaching of Middle School Health Education 3 s.h.
Curriculum, methods and materials for teaching middle school health education. Two hour lecture, Two hour lab. 60 field hours required.
Prereq.: HEPE 3702, BIOL 1545 and BCOE upper-division status.

HEPE 3716 Teaching of High School Health Education 3 s.h.
Curriculum, methods and materials for teaching high school health education. Two hour lecture and two hour lab. 60 field hours required.
Prereq.: HEPE 3702, BIOL 1545 and BCOE upper-division status.

HEPE 3740 Coaching the Young Athlete 3 s.h.
This course will address the pedagogy and practice of coaching sports with emphasis on youth sport development. The course will include coaching techniques, responsibilities, interaction with students and parents, injury prevention and sport psychology utilizing discussion, case method study, and practical application. The intent of the course is to help the student develop a coaching philosophy to positively affect youth sport development.
Prereq.: HEPE 2689.
HEPE 3750 Organization and Management of Sport Programs and Events 2 s.h.
The purpose of the course is to provide students with an understanding of the responsibilities of administrators and coaches involved in K-12 athletics. Content will focus on sport team scheduling, athletic facility requirements, fundraising, budgeting, event planning, career networking/advancement, coaching acquisition and termination, and increasing sport programs of an athletic program. Students will be introduced to the requirements of set policies by the school district, athletic conferences, state athletic associations, state and federal law and the National Collegiate Athletic Association (NCAA).
Prereq.: Junior standing.

HEPE 3766 Principles and Analysis of Motor Development 3 s.h.
Application of a lifespan motor development approach to critically analyzing movement patterns. Emphasis on motor development including biomechanical aspects of movement, and on teaching applications. Two hours lecture, two hours lab. 8 hours field experience required.
Prereq.: BIOL 1545 and BIOL 1545L.

HEPE 3767 Pedagogy in P-12 Health Education and Physical Education 3 s.h.
Effective teaching practices and development of skills including classroom management, lesson planning, and selection of appropriate methods of instruction. Peer teaching and reflection. Two hours lecture, two hours lab. 20 hours of field experience required.
Prereq.: 20 s.h. in major and HEPE 3766.

HEPE 3768 Advocacy and Best Practices in Health and Physical Education 2 s.h.
Emphasizes the advocacy role of the health and physical educator. Includes use of research and best practices documents to advocate for the inclusion of health and physical education for all P-12 learners. One hour lecture, two hour lab.
Prereq.: 20 s.h. in Physical Education major or Health Education major and HEPE 3767.

HEPE 3780 Methods of Teaching Dance 3 s.h.
Movement skills and music concepts will be explored through rhythmic movement for all P-12 grade student learners. Rhythm and movement fundamentals and forms: creative expression, exploration, folk, square, contra, line, social and aerobic. Teacher candidates will learn how develop, plan, teach and assess dance for all student learners. Two hour lecture, two hour lab.
Prereq.: HEPE 3767.

HEPE 4808 Standards Based Assessment in Health and Physical Education 3 s.h.
Theory, purposes, procedures, and uses of standards-based assessment for teaching P-12 health and physical education settings including cognitive, motor, and affective domains. Limitations of traditional assessment. Practical experience in designing assessments, collecting and analyzing data. Three hours lecture.
Prereq.: Physical Education or Health Education major and admission to BCOE upper-division status.

HEPE 4851 Cultural Aspects of Physical Education and Sport 3 s.h.
Survey of major historical, psychosocial developments, and philosophical issues in physical education and sport from ancient times to the present.
Prereq.: Junior standing.

HEPE 4852 Psychosocial Aspects of Physical Education and Sport 2 s.h.
Survey of major psychosocial principles, developments and concerns as they relate to the participant in physical activity and sport.
Prereq.: 20 s.h. in major.

HEPE 4860 Internship for Coaching Education 3 s.h.
The internship will consist of 180-220 field hours. The field experience will be in a youth sport and/or P-12 youth sport program. Examination of issues related to the coaching early childhood, middle childhood, special education, or adolescents/young adults program.
Prereq.: HEPE 3740, HEPE 3750, and HEPE 3767.

HEPE 4876 Teaching of Elementary Physical Education 3 s.h.
Curriculum, methods and materials for teaching elementary physical education. Critical task includes completion of a learning segment in area schools. Two hours lecture, two hours lab. 60 hours field experience required.
Prereq.: HEPE 3767 and BCOE upper-division status.

HEPE 4878 Teaching of Middle/Secondary Physical Education 3 s.h.
Curriculum, methods and materials for teaching secondary physical education. Critical task includes completion of a learning segment in area schools. Two hours lecture, two hours lab. 60 hours field experience.
Prereq.: HEPE 3767 and BCOE upper-division status.

HEPE 4889 Selected Topics in Health and Physical Education 2 s.h.
In depth study of special topics in Health and/or Physical Education. Topics to be determined. Two hour lecture. 30 hours field experience required.
Prereq.: HEPE 3768.
Concurrent with: HEPE 3702.

HEPE 4895 Introduction to Adapted Physical Education 4 s.h.
Introduction to developmentally appropriate, inclusive physical education for P-12 learners. Emphasis on acquiring a basic understanding of planning, delivering, and assessing appropriate inclusive physical education experiences for all children. Approximately 20 hours of field work. Three hour lecture, two hour lab.
Prereq.: HEPE 3766.

HEPE 4899 Physiological Effects of Exercise on Children and Adolescents 3 s.h.
Examining the body's response to physical activity in relation to the P-12 learner. Study of how physical activity influences the body's systems. Primary focus is application in a physical education setting.
Prereq.: HEPE 3766.

HEPE 6900 Pedagogical Analysis 3 s.h.
Description and analysis of pedagogical theories, models, and practices in physical education with emphasis on teaching methodology, the improvement of teaching skills, and planning for maximum student learning.

HEPE 6901 Sport in Society 3 s.h.
Sport studied as a social system interdependent with culture and society and as a social institution which is related to, or a part of, other basic institutions, such as the family, education, religion, the economy, politics, and the mass media.
Prereq.: HEPE 4851.

HEPE 6903 Curriculum Development 3 s.h.
Progressive development of the physical education curriculum for P-12 based on an analysis of contemporary curriculum theories and models in physical education. Emphasis on program planning and theory to practice.

HEPE 6905 Contemporary Issues in Sport Pedagogy 3 s.h.
A critical investigation and analysis of contemporary sport pedagogy issues, trends, problems, and concerns.

HEPE 6910 Teaching of Motor Skills 3 s.h.
Analysis of research on motor learning and its application to the acquisition, the teaching, and the coaching of movement skills.

HEPE 6920 Mechanical Analysis of Motor Movements 3 s.h.
Scientific basis for teaching correct form for the exact execution of movement skills within the fundamental laws of physics pertaining to motion. Analysis of various motor activities to determine the proper mechanics for obtaining the most effective and efficient results.

HEPE 6955 Physical Activity Principles for Children and Adolescents 3 s.h.
Scientific basis of physical fitness and its physiological basis. The role of health-related and performance-related physical fitness in physical activity and the lifespan. Analysis of acute responses and chronic adaptations of the body to the physiological demands of physical activity. A primary focus of the practical application to the teaching of physical education and sport coaching.
Prereq.: HEPE 4899 or equivalent.
Reading & Study Skills

RSS 1510A Advanced College Success Skills 3 s.h.
A course designed to develop students' skills essential for college studying. The primary focus is improving the comprehension and retention of college textbooks. Major topics include reading rate flexibility, vocabulary growth, learning style preferences, and critical reading skills. Students meet for classroom instruction, computer-aided instruction, and small group tutoring sessions to discuss and practice strategies. Open to students based on Composition and Reading Placement Test (CRPT). Grading is A, B, C, NC. Does not count toward a degree.

RSS 1510B Basic College Success Skills 3 s.h.
A course designed to acquaint and assist students in their transition to studying at the college level. Course content stresses development of skills in word recognition, vocabulary, and reading to find main ideas, supporting evidence and conclusions in college textbooks. Students meet for classroom instruction and small group tutoring sessions to discuss and practice various thinking, listening, and reading strategies to improve college performance. Open to students based on Composition and Reading Placement Test (CRPT). Grading is A, B, C, NC. Does not count toward a degree.

RSS 1510C STEM Advanced College Success Skills 4 s.h.
Develops study skills in STEM disciplines by improving comprehension and retention of textbook and lecture materials. Covers reading rate flexibility, vocabulary growth, learning style preferences, critical reading, and problem solving. Uses classroom instruction, computer-aided instruction, and small-group tutoring sessions to apply strategies, including STEM-based lecture applications. Grading: A, B, C, N/C. Does not count toward a degree.

Prereq.: ENGL 1540 and RSS 1510A.

RSS 1570 Approaches to Professional Assessments 2 s.h.
A course designed to assist students in preparation for graduate and professional-level standardized tests. Students will critically analyze the basic components of such tests. Emphasis will be placed on test requirements, test formats, guidelines for answering and scoring, and test-taking strategies.

RSS 1571 Approaches to Professional Assessments/Applications 1 s.h.
A course designed to prepare students for graduate and professional-level standardized tests. In study groups, students will critically analyze the basic components of the test for which they are preparing, including requirements, test formats, guideline for answering and scoring, and test-taking strategies, in conjunction with effective pedagogical procedures.

Secondary Education

SED 3706 Principles of Teaching Adolescents 3 s.h.
Classroom management, Instructional strategies, and technology integration for diverse learners in the high school classroom. Cross-disciplinary curriculum exploration. Reflection and analysis of peer and classroom teaching experience. Field hours required.

Prereq.: BCOE upper-division status.

Coreq.: TERG 3711.

SED 4800B Special Methods: Integrated Business 3 s.h.
Techniques used in teaching integrated business subjects. Observation of teaching in a vocational setting, presentation of a lesson in a secondary or vocational school, unit development, reflective writing. Organization, administration, implementation, and evaluation of vocational business education programs at the secondary and adult education levels.

Prereq.: BCOE upper-division status and approval of chairperson.

Coreq.: SED 3706, TERG 3711 and FOUN 3710.

SED 4800C Science Methods for Adolescent and Young Adult Learners 3 s.h.
Using NSTA/NCATE and Ohio content standards, candidates establish and maintain learning environments that provide diverse students with a holistic, interdisciplinary understanding of science. Background for teaching science, instructional strategies, classroom management, planning instruction, assessment, professional development, integration of content with inquiry emphasized. Field hours required.

Prereq.: BCOE upper-division status, SED 3706, TEMC 3707, 24 s.h. science.

Coreq.: EDFN 3710.

SED 4800E English Methods for Adolescent and Young Adult Learners 3 s.h.
Exploring and demonstrating reflective teaching methods for adolescent learning of English: planning instruction, execution of teaching/learning activities, representations of English concepts, authentic assessment, English communication, purposeful use of instructional technology, classroom management for effective teaching. Field hours required.

Prereq.: BCOE upper-division status and SED 3706.

Coreq.: EDFN 3710.

SED 4800M Mathematics Methods for Adolescent and Young Adult Learners 3 s.h.

Prereq.: BCOE upper-division status and SED 3706.

Coreq.: EDFN 3710.

SED 4800S Social Studies Methods for Adolescent and Young Adult Learners 3 s.h.
Theory and practice in learning how to plan, execute, and evaluate social studies lessons that are empowering, interesting, and reflective. Topics include: creating thematic unit plans; interpreting academic standards; writing instructional objectives; creating authentic learning activities; authentic assessment; classroom management and democratic discipline. Field hours required.

Prereq.: BCOE upper-division status and SED 3706.

Coreq.: EDFN 3710.

SED 4827 Supervised Student Teaching: Language (K-12) 1-10 s.h.
Sixteen week supervised clinical teaching experience in licensure area. Provides candidate with opportunities to apply knowledge and skills, and display dispositions needed to effectively teach in diverse classrooms. CR/NC.

Prereq.: BCOE Upper-Division Status with a minimum overall GPA of 2.75, passing scores on OAE tests prior to the start of the student teaching semester, criminal background check, and successful completion of respective preclinical experience, with minimum content GPA of 2.67 and professional education GPA of 2.67.

Gen Ed: Capstone.

SED 4842 Supervised Student Teaching: High School 1-10 s.h.
Sixteen week supervised student clinical teaching experience in licensure area. Provides candidate with opportunities to apply knowledge and skills, and display dispositions needed to effectively teach in diverse classrooms. CR/NC.

Prereq.: BCOE upper-division status with a minimum overall GPA of 2.75, passing scores on OAE tests prior to the start of the student teaching semester (to include ACTFL for foreign language majors), criminal background check, and successful completion of respective preclinical experience with minimum content GPA of 2.67 and professional education GPA of 2.67.

Gen Ed: Capstone.
SED 4842A  Student Teaching Seminar for Secondary Education  2 s.h.
Student Teaching seminar provides an opportunity to study relevant topics
related to teaching and learning, application of professional and ethical
discipline and reflection on practice. Completion of edTPA is required. CR/NC. Coreq.
SED 4827, SED 4842, SED 4843, SED 4844, SED 4845, SED 4846 or 4850.
Prereq.: BCOE Upper-Division Status; Admission to Student Teaching in AYA
licensure program.

SED 4843  Supervised Student Teaching: Art (K-12)  1-10 s.h.
Sixteen week supervised clinical teaching experience in licensure area.
Provides candidate with opportunities to apply knowledge and skills, and
display dispositions needed to effectively teach in diverse classrooms. CR/NC.
Prereq.: BCOE Upper-Division Status with a minimum overall GPA of 2.75,
passing scores on OAE tests prior to the start of the student teaching
semester; criminal background check, and successful completion of respective
preclinical experience, with minimum content GPA of 2.67 and professional
education GPA of 2.67.
Coreq.: SED 4842A.
Gen Ed: Capstone.

SED 4844  Supervised Student Teaching: Music (K-12)  1-10 s.h.
Sixteen week supervised clinical teaching experience in licensure area.
Provides candidate with opportunities to apply knowledge and skills, and
display dispositions needed to effectively teach in diverse classrooms. CR/NC.
Prereq.: BCOE Upper-Division Status with a minimum overall GPA of 2.75,
passing scores on OAE tests prior to the start of the student teaching
semester; criminal background check, and successful completion of respective
preclinical experience, with minimum content GPA of 2.67 and professional
education GPA of 2.67.
Coreq.: SED 4842A.
Gen Ed: Capstone.

SED 4845  Supervised Student Teaching: Health (K-12)  1-10 s.h.
Sixteen week supervised clinical student teaching experience in licensure area.
Provides candidate with opportunities to apply knowledge and skills, and
display dispositions needed to effectively teach in diverse classrooms. CR/NC.
Prereq.: BCOE Upper-Division Status with a minimum overall GPA of 2.75,
passing scores on OAE tests prior to the start of the student teaching
semester; criminal background check, and successful completion of respective
preclinical experience, with minimum content GPA of 2.67 and professional
education GPA of 2.67.
Coreq.: SED 4842A.
Gen Ed: Capstone.

SED 4846  Supervised Student Teaching: Physical Education (K-12)  1-10 s.h.
Sixteen week supervised clinical teaching experience in licensure area.
Provides candidate with opportunities to apply knowledge and skills, and
display dispositions needed to effectively teach in diverse classrooms. CR/NC.
Prereq.: BCOE Upper-Division Status with a minimum overall GPA of 2.75,
passing scores on OAE tests prior to the start of the student teaching
semester; criminal background check, and successful completion of respective
preclinical experience, with minimum content GPA of 2.67 and professional
education GPA of 2.67.
Coreq.: SED 4842A.

SED 4850  Supervised Student Teaching: Career/Technical  1-10 s.h.
Full-time 16 week student teaching in grades 4-adult supervised by University
faculty and experienced career/technical practitioners licensed in the teaching
subject of the candidate. Grading is CR/NC.
Prereq.: BCOE upper-division status, passing scores on PRAXIS II content and
PLT test, criminal background check, and completion of adolescent/young
adult or career/technical program excluding student teaching and student
teaching seminar.
Coreq.: SED 4842A.

SED 6910  Supervision Secondary Schools  2 s.h.

SED 6920  Field Experience Supervision  2 s.h.

SED 6965  Supervised Student Teaching: High School  5 s.h.
Full-time 16-week student teaching in grades 7-12 supervised by University
faculty and experienced AYA practitioners licensed in the teaching subject of
the candidate. To be taken concurrently with SED 6965A. Grading is S/U.
Prereq.: Completion of all requirements for initial Adolescent/Young Adult
licensure and permission of advisor.

SED 6990  Independent Study  1-4 s.h.
Individual investigation of advanced topics under guidance of selected staff.
Prereq.: FOUN 6904.

SED 7025  Seminar in Secondary Education  1-5 s.h.
Study of selected topics chosen by the secondary education staff. May be
repeated by non-degree students. See TCED 7032.
Prereq.: Permission of instructor.

SED 7042  Professional Development for Classroom Teacher Educators  2 s.h.
A restricted professional development course for classroom teacher educators
invited to supervise the instructional program of student teachers and field
experience students. The course concentrates on developing analytical
observation, conferencing, evaluation, and supervision skills based on
scientific knowledge and theoretical constructs.
Prereq.: Invitation from YSU and endorsement from home school district to
serve as a classroom teacher educator.
Cross-listed: EMCE 7042.

Special Education

SPED 2630  Individuals with Exceptionalities in Society  3 s.h.
Characteristics, adjustment problems, special needs with emphasis on
educational solutions, co-teaching, and inclusionary practices. The laws
and implementation; placement, programming, due process, resources
recommended for accommodation of exceptional learners in diverse settings.
Field hours required.
Coreq.: SPED 2630L.

SPED 2630L  Individuals with Exceptionalities in Society Laboratory
Experience  0 s.h.
Laboratory experience for creating effective classroom environments for
learners with special needs. Integrating the use technology to positively
impact learning. Exercises designed to assist the student in better
understanding the needs of all learners. Coreq: SPED 2630.

SPED 3715  Characteristics and Needs of Children and Youth with Mild/
Moderate Disabilities  3 s.h.
Description and classification of students with mild/moderate disabilities
and the impact on academic, social and emotional development. Relationship
to the contributions of diverse disciplines to theory and practice. A
developmental approach to motor, perceptual, cognitive, language and social-emotional
functioning within inclusive educational settings. Use of Universal
Design for Learning as a framework for accessible and varied learning
opportunities for individuals with exceptionalities. Field hours required.
Prereq.: SPED 2630.

SPED 4828  Education for Children and Youth with Emotional Behavior
Needs  4 s.h.
Instruction, curriculum and program development for youth who are
identified with emotional disturbance and as a result are often in conflict with
educational and social systems. Field hours required.
Prereq.: BCOE Upper-Division Status.

SPED 4831  Assessment and Referral in Early Childhood  3 s.h.
Development of skills in referral and assessment techniques for the regular
early childhood educator with emphasis on both formal and informal methods
such as observation, authentic assessment, standardized measures and
interviewing. Attention to children with disabilities and/or gifts and talents.
Prereq.: Upper-division status.
SPED 4833  
Characteristics and Needs of Exceptional Children and Youth with Moderate/Intensive Disabilities 3 s.h.
Identification and intervention in critical areas of development for individuals with moderate/intensive disabilities including autism. Developing objectives, planning and implementing adapted curriculum in consultation with interdisciplinary specialists.
Prereq.: BCOE Upper-Division Status and SPED 3715.

SPED 4834  
Educational Strategies and Methods for Children and Youth with Moderate/Intensive Disabilities 4 s.h.
Curriculum planning, teaching methods, habilitation and rehabilitation for persons with multiple and/or severe developmental disabilities. Field hours required.
Prereq.: BCOE Upper-Division Status and SPED 4833.

SPED 4835  
Classroom Management for Exceptional Children and Youth 4 s.h.
Development, implementation and evaluation of behavior management plans and strategies for students with exceptionalities in the classroom environment. Behavior management techniques to facilitate learning, self-management, and the development of social skills. Communicating effective management programs to parents, caregivers, teachers, and stakeholders. Field hours required.
Prereq.: BCOE Upper-Division status.

SPED 4839  
Supervised Student Teaching: Moderate/Intensive Intervention Specialist 1-10 s.h.
Sixteen week supervised clinical teaching experience in licensure area. Provides candidate with opportunities to apply knowledge and skills, and display dispositions needed to effectively teach in diverse classrooms. CR/NC.
Prereq.: BCOE Upper-Division Status with a minimum overall GPA of 2.75, passing scores on OAE tests prior to the start of the student teaching semester, criminal background check, and successful completion of respective preclinical experience, with minimum content GPA of 2.67 and professional education GPA 2.67.
Coreq.: SPED 4869.
Gen Ed: Capstone.

SPED 4849  
Supervised Student Teaching: Mild Moderate/Disabilities 1-10 s.h.
Sixteen week supervised clinical teaching experience in licensure area. Provides candidate with opportunities to apply knowledge and skills, and display dispositions needed to effectively teach in diverse classrooms. CR/NC.
Prereq.: BCOE Upper-Division Status with a minimum overall GPA of 2.75, passing scores on OAE tests prior to the start of the student teaching semester, criminal background check, and successful completion of respective preclinical experience, with minimum content GPA of 2.67 and professional education GPA 2.67.
Coreq.: SPED 4869.
Gen Ed: Capstone.

SPED 4851  
Transition Planning, Social Skill Development and Health-Related Issues 3 s.h.
Emphasis on lifelong career orientation and the development and implementation of a K-12 prevocational/vocational curriculum. Effective teaching of interpersonal communication and social skills. Classroom climate, self-esteem, health-related issues. Integration of practical experiences in the classroom, home, and community. Field hours required.
Prereq.: BCOE Upper-Division Status.

SPED 4852  
Prog Development Instructional Strategies for Learners with Moderate to Intensive Except Learn Needs 3 s.h.
This course is designed to expand technical terminology and applied practices for candidates working towards licensure for students with moderate to intensive exceptional learning needs. Candidates will create individualized objectives, apply evidence-based practices, and report progress. Field hours required.
Prereq.: BCOE Upper-Division Status and SPED 4834.

SPED 4853  
Diagnosis and Intervention in Mathematics for Special Education 3 s.h.
Principles, practices, materials, and aids for teaching mathematics in special education, including diagnosis and evaluative procedures, individualized instructional techniques. Field hours required.
Prereq.: BCOE Upper-Division Status.

SPED 4854  
Cross-Curricular Interventions 4 s.h.
Field application of principles of reading in the content areas, organization and implementation of cross-curricular content areas across grade levels. Includes management of special education/inclusionary classrooms. Field hours required.
Prereq.: BCOE Upper-Division Status, SPED 4828, SPED 4834, or SPED 4868.

SPED 4857  
Applied Technology in the Education of Children and Youth with Disabilities 4 s.h.
Explores various concepts related to the use of applied technology for children and youth with disabilities. Includes assistive technology and alternative modes of communication as well as the use of appropriate software.
Prereq.: Admission to upper-division COE status.

SPED 4864  
Service Coordination, Collaboration, and Consultation for Students with Special Needs 3 s.h.
Methods and strategies for the cooperation and involvement of related services professionals, parents, and children in the coordination of comprehensive educational and service plans. Collaboration, communication skills and sensitivity to individual and cultural differences are stressed. Field hours required.
Prereq.: BCOE Upper-Division Status.

SPED 4866  
Assessment and Referral of Exceptional Children and Youth for the Intervention Specialist 3 s.h.
Development of skills in referral and assessment techniques in the areas of mild/moderate and moderate/intensive disabilities. Informal and formal methods including observation, authentic assessments, standardized measures, interviewing. Referral, initial and subsequent evaluation, annual review concerns.
Prereq.: BCOE Upper-Division Status.

SPED 4867  
Intervention and Remediation of Receptive/Expressive Language Dysfunction 3 s.h.
Theory and practice of intervention and remediation of basic cognitive processes especially in the areas of receptive and expressive language and cognitive skills for the intervention specialist. Field hours required.
Prereq.: BCOE Upper-Division Status.

SPED 4868  
Mild/Moderate Disabilities Practicum 4 s.h.
Diagnostic procedures used to develop a comprehensive assessment of a child's current functioning. Individualized education program/case study developed and partially implemented. Field hours required.
Prereq.: BCOE Upper-Division Status, SPED 4866 and SPED 4867.

SPED 4869  
Student Teaching Seminar for Special Education 2 s.h.
Student Teaching seminar provides an opportunity to study relevant topics related to teaching and learning, application of professional and ethical practice and OSTP standards, research and theory, knowledge of learners, and reflection on practice. Completion of edTPA is required. CR/NC.
Prereq.: BCOE Upper-Division Status; Admission to Student Teaching in Special Education.
Coreq.: SPED 4839 and/or SPED 4849.

SPED 4872  
Assessment and Referral for Children and Youth with Exceptionalities for the Intervention Specialist 3 s.h.
Development of skills in referral and assessment techniques for the special educator in the areas of moderate/intensive disabilities. Emphasis will be given to informal and formal methods such as observation, authentic assessment, alternate assessment, rubrics, inventories, interviewing, task analysis, functional behavioral analysis, curriculum based measurement and formal standardized measures.
Prereq.: BCOE Upper-Division Status.
SPED 4873 Communication and Literacy Skills for Learners with Significant Disabilities 3 s.h.
This course focuses on enhancing functional communication and literacy skills of students with severe disabilities. Assessment and strategies to increase communication form, function and literacy are covered. The course addresses aided and non-aided augmentative systems and alternative communication systems with an emphasis on using a multi-modality approach.
Prereq.: BCOE Upper-Division Status.

SPED 5810 Introduction to Sign Language 3 s.h.
Deaf Culture, ASL, and English Sign Language differences will be discussed. Students will acquire basic proficiency in sign language.

SPED 5828 Education for Children and Youth with Emotional and Behavior Needs 4 s.h.
Instruction, curriculum and program development for youth who are identified with emotional disturbance and as a result are often in conflict with educational and social systems. Field hours required.
Prereq.: BCOE Upper-Division Status.

SPED 5833 Characteristics and Needs of Exceptional Children and Youth with Moderate/Intensive Disabilities 3 s.h.
Identification and intervention in critical areas of development for individuals with moderate/intensive disabilities including autism. Developing objectives, planning and implementing adapted curriculum in consultation with interdisciplinarians.
Prereq.: Upper-division status in COE, SPED 5815.

SPED 5834 Educational Strategies and Methods for Children and Youth with Moderate/Intensive Disabilities 4 s.h.
Curriculum planning, teaching methods, habilitation and rehabilitation for persons with multiple and/or severe developmental disabilities. Practicum included.
Prereq.: Upper-division status in COE, SPED 5833.

SPED 5835 Classroom Management for Exceptional Children and Youth 4 s.h.
Development, implementation and evaluation of behavior management plans and strategies for students with exceptionalities in the classroom environment. Behavior management techniques to facilitate learning, self-management, and the development of social skills. Communicating effective management programs to parents, caregivers, teachers, and stakeholders. Field hours required.
Prereq.: BCOE Upper-Division Status.

SPED 5851 Transition Planning, Social Skill Development and Health-Related Issues 3 s.h.
Emphasis on lifelong career orientation and the development and implementation of a K-12 prevocational/vocational curriculum. Effective teaching of interpersonal communication and social skills. Classroom climate, self-esteem, health-related issues. Integration of practical experiences in the classroom, home, and community.
Prereq.: Upper-division status in COE.

SPED 5852 Prog Development Instructional Strategies for Learners with Moderate to Intensive Except Learn Needs 3 s.h.
This course is designed to expand technical terminology and applied practices for candidates working towards licensure for students with moderate to intensive exceptional learning needs. Candidates will create individualized objectives, apply evidence-based practices, and report progress. Successful completion of a 30 hour field experience is required.
Prereq.: Admission to BCOE Upper Division, SPED 5834.

SPED 5853 Diagnosis and Intervention in Mathematics for Special Education 3 s.h.
Principles, practices, materials and aids for teaching mathematics in special education. Diagnostic and evaluation procedures; individualized instructional techniques; observation, tutoring, and participation. Field experience required.
Prereq.: Upper-division status in COE.

SPED 5858 Intervention Concepts and Strategies in Early Childhood Special Education 2 s.h.
Review and analysis of the methods by which young children construct knowledge about their physical, social and intellectual worlds. Study of patterns of normal and atypical development from birth through age eight, as well as the development of appropriate models for effective intervention.
Prereq.: PSYC 3755.

SPED 5864 Service Coordination, Collaboration, and Consultation for Students with Special Needs 3 s.h.
Methods and strategies for the cooperation and involvement of related services professionals, parents, and children in the coordination of comprehensive educational and service plans. Collaboration, communication skills and sensitivity to individual and cultural differences are stressed. Field hours required.
Prereq.: BCOE Upper-Division Status.

SPED 5865 Workshop in Special Education 1-4 s.h.
Intensive study and related activities in one or more of the following special education curriculum areas: trainable mentally retarded, educable mentally retarded, learning disability/behavior disorder, multi-handicapped. May be repeated if content is different.
Prereq.: Admission to upper-division COE status.

SPED 5866 Assessment and Referral of Exceptional Children and Youth for the Intervention Specialist 3 s.h.
Development of skills in referral and assessment techniques in the areas of mild/moderate and moderate/intensive disabilities. Informal and formal methods including observation, authentic assessments, standardized measures, interviewing. Referral, initial and subsequent evaluation, annual review concerns.
Prereq.: BCOE Upper-Division Status.

SPED 5867 Intervention and Remediation of Receptive/Expressive Language Dysfunction 3 s.h.
Theory and practice of intervention and remediation of basic cognitive processes especially in the areas of receptive and expressive language and cognitive skills for the intervention specialist.
Prereq.: Upper-division status in COE.

SPED 5868 Mild/Moderate Disabilities Practicum 4 s.h.
Diagnostic procedures used to develop a comprehensive assessment of a child's current functioning. Individualized education program/case study developed and partially implemented. Field hours required.
Prereq.: BCOE Upper-Division Status, SPED 5865 and SPED 5867.

SPED 5870 Independent Study in Special Education 1-4 s.h.
Individual work under special education staff guidance; curriculum development or special education areas; individual problems in community agencies or school.
Prereq.: Admission to upper-division COE status.

SPED 5871 Characteristics and Needs of Gifted Children 3 s.h.
Introduction to gifted education. Overview of the theoretical and research base for gifted education, including appropriate classroom environments, teacher qualifications, and support services to meet the diverse social, emotional, and intellectual needs of gifted children. Current program standards.
Prereq.: Admission to COE upper-division status.

SPED 5872 Assessment and Referral for Children and Youth with Exceptionalities for the Intervention Specialist 3 s.h.
Development of skills in referral and assessment techniques for the special educator in the areas of moderate/intensive disabilities. Emphasis will be given to informal and formal methods such as observation, authentic assessment, alternate assessment, rubrics, inventories, interviewing, task analysis, functional behavioral analysis, curriculum based measurement, DIBELS/SWIS, and formal standardized measures.
Prereq.: Admission to BCOE Upper Division Status.
SPED 5873 Communication and Literacy Skills for Learners with Significant Disabilities 3 s.h.
This course focuses on enhancing functional communication and literacy skills of students with severe disabilities. Assessment and strategies to increase communication form, function and literacy are covered. The course addresses aided and non-aided augmentative systems and alternative communication systems with an emphasis on using a multi-modality approach.
Prereq.: Admission to BCOE Upper Division Status.

SPED 5878 Teaching Gifted and Talented Students 4 s.h.
Theory and organization of curriculum with design and integration of content subjects into varying models. Wide range of strategies and identification of resources and materials as well as investigations in educational technology and appropriate applications for gifted children.
Prereq.: Upper division status in COE; SPED 5871 and permission of instructor.

SPED 5965 Special Education Workshop 1-5 s.h.
A workshop designed to examine contemporary topics in the field.

SPED 6900 Issues, Trends & Ethical, Legal and Professional Guidelines in Special Education 3 s.h.
This course is designed to provide the candidate with an exploratory study of the issues, trends, as well as the ethical, legal and professional guidelines in special education. Candidates will become familiar with legal policies and procedures as well as practice ethical guidelines as related to students with exceptionalities. Candidates will understand how to advocate for improving outcomes for learners with exceptionalities and their families as well as design and implement professional learning activities to increase their own practices.

SPED 6901 System-Wide Consultation/Collaboration in the Schools 3 s.h.
Current educational practices have made collaboration an essential way education professionals do their work. This course will cover the theoretical bases and consultation/collaboration skills necessary for affecting change in the educational environment from a system wide perspective. The aim of this course is to prepare Intervention Services students to function as collaborative consultants promoting systematic and planned strategies for use within the public schools and with families with children with disabilities.

SPED 6905 Cultural/Ethnic Issues Relating to Youth and Families 3 s.h.
Introduces pertinent theoretical cultural issues which relate to mental health professionals as they work with diversified populations. In particular, therapeutic skill enhancement of professionals will be advanced, since all counseling may be seen as cross-cultural. Group work and experiential exercises will provide an avenue for the professional and personal cultural growth of each participant. The goal is to also enhance participant's level of cultural sensitivity.

SPED 6906 Understanding and Addressing the Characteristics and Behaviors of Learners with Exceptional Needs 3 s.h.
This course is designed to provide the candidate with the knowledge and understanding of how individuals with exceptionalities grow and develop in an inclusive learning environment. Candidates will understand how multiple influences, including diversity, families, communities and individual differences shape an individual with an exceptionality's development and learning. The candidate will then use this knowledge to develop high-quality learning experiences based on strengths and needs.

SPED 6907 Guidelines for Teaching Children Who are Deafblind With and Without Concomitant Disabilities 4 s.h.
This course focuses on understanding and meeting the needs of children with multiple disabilities and/or concomitant conditions in addition to visual impairment in P-12 settings. In particular, this course will emphasize the needs of the child who has combined hearing-vision loss (i.e., deafblindness or dual sensory impairments). The additional concomitant conditions may include autism, traumatic brain injury, intellectual disability, orthopedic impairments, and/or the impact of various syndromes. There is a supervised 30 field experience associated with the course.

SPED 6908 Practicum in Visual Impairment 2 s.h.
This course represents the clinical practice/practicum portion of the EDVI program. Fifty hours of practicum experience will take place in a variety of instructional and age/grade level setting serving children with VI.
Prereq.: SPED 6907.

SPED 6909 Assessment and Intervention for Students with Low Incidence Disabilities 3 s.h.
Emphasis will be on current most effective practices of the professional collaboration process across three tiers of service to include specific models and strategies for students in general education and especially those with autism and/or a low incidence disability. Candidates will develop a team training model and will evaluate evidence-based practices.

SPED 6911 International Area Study: Project Learning Around the World 3 s.h.
This course is designed to enhance mental health or teacher's professional and personal level of sensitivity and competence via introducing them to innovative and traditional forms of intervention or healing in community and school settings in a developing country. Students will participate in philanthropic activities by helping to gather and deliver educational supplies via Project Learning Around the World (www.platw.org).

SPED 6912 Multilevel Tier Interventions Across General Education and Special Education Programming 3 s.h.
Direct experiences in planned multilevel interventions across the three tiers of services within educational school systems for regular education and children with disabilities. Participation in RTI team meetings, curriculum academic and applied and functional behavioral analysis, progress monitoring, goal attainment scaling and determining effectiveness of intervention plans will be introduced.

SPED 6914 Positive Behavior Supports/Intervention Strategies to Support Social-Emotional Needs of All Learners 3 s.h.
This course is designed to address the social-emotional and behavioral needs of children with mild to intensive needs, including those needing intensive support due to disability or trauma. It provides education candidates with effective routines and procedures consistent with the science of Applied Behavior Analysis (ABA) to create a safe, caring, respectful and productive learning environment as well as a range of preventive and responsive practices. Candidates will apply specific tools grounded in the principles of ABA with ethical strategies being of particular focus. Candidate skills will be grounded in the ability to plan, implement and evaluate behavioral interventions and social skills programs within any special education service delivery model.

SPED 6915 Classroom Management and Crisis Intervention for Learners with Severe Emotional and Behavior Disorders 3 s.h.
Behavior analysis, behavior management, instruction, curriculum and program development for youth with severe emotional and/or behavior disorders. Advanced behavior change interventions and a practicum consisting of work in the field with emotionally and/or behaviorally disturbed youth required.
Prereq.: Successful completion of SPED 6909.

SPED 6916 Planning, Teaching, Accommodating and Assessing Learners with Mild-Intensive Exceptional Needs 3 s.h.
This course is designed to provide the candidate with knowledge of general and specialized curricula for students with exceptionalities. Based on each individual's needs, the candidate will understand how to use rigorous content standards to plan, accommodate and assess the curricula across all content area. The candidate will grasp how to modify the general and specialized curricula to make them accessible and in alignment with the rigorous content standards for individuals with an exceptionality.
SPED 6917 **Effective Instruction for Learners with Exceptional Needs** 3 s.h.
This course is designed to provide the candidate with the knowledge about
individuals with an exceptionality and development and assessment data to inform
decisions about effective instruction. Candidates will understand how to
use explicit and systematic instructional strategies including active student
engagement and motivation, differentiated instruction, flexible and small
groups, specialized individualized instruction, self-regulated learning and
meta-cognition strategies. The candidate will then use this knowledge to plan
and guide instruction to meet the rigorous content goals for each individual
with an exceptionality's academic and social-behavioral needs.

**Prereq.:** Successful completion of SPED 6906.

SPED 6927 **Curriculum Design, Adaptations and Resources for Learners with Mild/Moderate Exceptional Learning** 3 s.h.
Knowledge of curriculum terminology approaches and models, content, and
design to provide and enhance access to the general curriculum for students
with exceptional learning needs. Course focuses on the skills to select and
implement curricular adaptations for learners with exceptional learning needs
within the general education classroom.

**Prereq.:** Successful completion of SPED 6906.

SPED 6928 **Transition to Adult Life** 3 s.h.
This course is designed to provide candidates with best practices of the
professional collaboration process to include specific models and strategies
to improve the transition from school to adult life, including career readiness,
community, and domestic skills for students with mild to intensive learning
needs. Candidates will develop a team training model and evaluate evidence-
based practices regarding the transition process for students. Individual
strengths and characteristics will be considered to facilitate social, vocational,
and daily living skills for all learners. Successful completion of field related
assessment project is required.

SPED 6929 **Assessment of Exceptional Learners** 3 s.h.
This course focuses on the educational assessment process for exceptional
learners. Topics include state and federal regulations, data collection
techniques, formative and summative assessment, and test interpretation.
Importance of instructional alignment between objectives, assessment, and
instructional strategies.

SPED 6930 **Instructional Methodologies for Learners with Mild/Moderate and Moderate/Intensive Exceptional Lea** 4 s.h.
This course is designed to provide candidate with the opportunity to research,
study, apply and analyze instructional strategies and delivery systems in the
four major content areas. The candidates will use the referenced strategies
to both support and promote single subject and cross-curricular high quality
instruction for candidates with special needs.

**Prereq.:** Successful completion of SPED 6914, SPED 6927, SPED 6928, SPED 6929.

SPED 6931 **Field-based Practicum with Exceptional Learners in Grades K-6** 3 s.h.
Practicum experience, with mild/moderate exceptional learners within grades
K-6, in which the candidate acquires and demonstrates the knowledge,
skills, and dispositions to design and implement data guided standards-
based instruction with differentiated methods, assessments that promote
learner growth including effective feedback, and collaboratively work
with teacher(s), parents/guardians, and related service professional(s) to
implement instruction to meet learners’ diverse needs. Field hours required.

**Prereq.:** SPED 6900, SPED 6906, SPED 6914, SPED 6916, SPED 6917, SPED 6928, SPED 6929.

SPED 6932 **Field-based Practicum on Inclusive Practices with Exceptional Learners in Grades 7-12** 3 s.h.
Practicum experience, with mild/moderate exceptional learners in an
inclusion classroom within grades 7-12, in which the candidate acquires and
demonstrates the knowledge, skills, and dispositions to design and implement
data guided standards-based instruction with differentiated methods,
assessments that promote learner growth through effective feedback, and
collaboratively work with teacher(s), parents/guardians, and related service
professional(s) to implement instruction and identify transition services to
meet learners’ diverse needs. Field hours required.

SPED 6933 **Field-based Practicum with Moderate/Intensive Exceptional Learners in Grades K-6** 3 s.h.
Practicum experience, with moderate/intensive exceptional learners within
grades K-6, in which the candidate acquires and demonstrates the knowledge,
skills, and dispositions to design and implement data guided standards-
based instruction with differentiated methods, assessments that promote
learner growth including effective feedback, and collaboratively work
with teacher(s), parents/guardians, and related service professional(s) to
implement instruction to meet learners’ diverse needs. Field hours required.

SPED 6934 **Field-based Practicum with Moderate/Intensive Exceptional Learners in Grades 7-12** 3 s.h.
Practicum experience, with moderate/intensive exceptional learners within
grades 7-12, in which the candidate acquires and demonstrates the knowledge,
skills, and dispositions to design and implement data guided standards-
based instruction with differentiated methods, assessments that promote
learner growth including effective feedback, and collaboratively work
with teacher(s), parents/guardians, and related service professional(s) to
implement instruction to meet learners’ diverse needs. Field hours required.

SPED 6935 **Special Topics in Disabilities Education** 1-4 s.h.
Workshop will include information on various current topics appropriate
to the education of students with disabilities. These include assessment,
identification, and instructional processes.

**Prereq.:** PRAXIS passage.

SPED 6980 **Topical Seminar in Special Education** 1-4 s.h.
Selected topics in special education. May be repeated for different content.

SPED 6981 **Seminar in Special Education** 3 s.h.
This course details current issues in the field of special education involving
research, pedagogy, methodologies, and application. Emphasis is on the
intervention and remediation of receptive/expressive language dysfunctions,
as well as other issues related to children and youth with disabilities.

**Prereq.:** SPED 6983.

SPED 6991 **Referral and Assessment in Early Childhood Special Education** 3 s.h.
The course focuses on the educational assessment process as it applies to
students with exceptionalities. Topics include a review of state and federal
regulations; data collection techniques, including both formal and informal
methods; appropriate test preparation and interpretations; and design of
identification and placement procedures.

**Prereq.:** SPED 5871.

SPED 6984 **Major Concepts and Program Design for Students in Special Education** 3 s.h.
Major concepts, program development, and program evaluation involving
youth with special needs are parts of this course. Programs related to the
transition process will be studied and reviewed.

SPED 6986 **Severe Behavior Disorders** 3 s.h.
A comprehensive analysis of programs and the description of the delivery of
services to a wide range of seriously emotionally disturbed children and youth.

**Prereq.:** SPED 6906 or SPED 6983.

SPED 6991 **Referral and Assessment in Early Childhood Special Education** 3 s.h.
Intensive hands-on experience in referral and assessment of young children.
Emphasis on philosophy and ethical considerations, as well as techniques,
instruments, and the referral process. Participation within the assessment
team with parents involved as equal partners in the multidisciplinary process.
Written assessment reports are required based upon knowledge of child
development and a variety of sources of input.

**Prereq.:** Admission to College of Education upper division; SPED 5858.

SPED 6992 **Teaching Methods in Early Childhood Special Education** 3 s.h.
Examines accepted curricular models in early childhood special education,
as well as classroom management and motivation strategies as they relate
to young children with special needs. Emphasizes the inclusion of parents in
planning process. Students will learn to integrate curriculum with individual
IEP/IFSP goals and objectives.

**Prereq.:** SPED 5858.
SPED 6993 Health and Related Issues in Early Childhood Special Education 2 s.h.
A study of curricular experiences focusing on those aspects of early childhood special education dealing with the instructional applications of technology and the use of adaptive equipment and related services as these relate to technologically dependent or chronically ill children.

SPED 6994 Field Experiences in Early Childhood Special Education 4-8 s.h.
Supervised field experiences incorporating theory, planning, and implementation of services for young children with special needs.
Prereq.: SPED 6958, SPED 6991, SPED 6992, SPED 6993.

SPED 6996 Teaching Strategies/Autism 4 s.h.
Application of assessment, curriculum planning, preparation of materials and practice teaching methods for students with autism spectrum disorders and related disabilities. Methodology emphasizes most effective practices for instructing students who need academic and/or life skills curricula.
Prereq.: SPED 6914 or equivalent.

SPED 6998 AAC Strategies 3 s.h.
Assessment and application of methods to increase communication form, function, and literacy for individuals who need alternate and/or augmentative communication (AAC).
Prereq.: SPED 6996 and PSYC 6960 or PSYC 6990.

SPED 7021 Field Experience 1 3 s.h.

SPED 7042 Professional Development for Classroom Teacher Educators 2 s.h.
A restricted professional development course for classroom teacher educators invited to supervise the instructional program of student teachers and field experience students. The course concentrates on developing analytical observation, conferencing, evaluation, and supervision skills based on scientific knowledge and theoretical constructs.
Prereq.: Invitation from YSU and endorsement from home school district to serve as a classroom teacher educator.

SPED 7077 Leadership in Special Education 3 s.h.
The course focuses on leadership, administration, and supervision of a broad range of programs and services for students with exceptionalities (students with disabilities). Topics include review of theoretical foundations, historical and sociological issues as these relate to education for special populations, as well as in-depth study of federal and state legal issues, differentiated programming and procedures, student identification and placement, individualized education plans, due process, lease restrictive environment, and program monitoring and evaluation.

Teacher Education Middle Childhood

TEMC 3702 Teaching & Learning in Middle Schools 3 s.h.
Physical, social, emotional, intellectual, and moral development within social and cultural contexts to uncover implications for developmentally and culturally responsive curriculum and instruction.
Prereq.: BCOE upper-division status.

TEMC 3703 Thematic Instruction and Assessment Methods in Social Studies 3 s.h.
Investigation and application of principles from history, geography, civics, economics, and related fields to create appropriate learning experiences for early adolescents. Exploration of middle grade level group and individual assessment, thematic, problem-solving instructional approaches, and reflective evaluation of learning in a field-based setting.
Prereq.: TEMC 3702, BCOE upper-division status, and approval of chairperson.
Coreq.: TEMC 4801 and one of TEMC 3704, TEMC 3705, or TEMC 3706.

TEMC 3704 Teaching Mathematics in the Middle School 3 s.h.
Focus on identifying and modeling strategies used for problem solving, communicating, and reasoning in mathematics. Learning to use mathematical connections to stimulate diverse students' development of math concepts and skills and creating learning environments in which students feel free to take risks. Field experience combining mathematics pedagogy/methodology in a middle grade classroom.
Prereq.: TEMC 3702, BCOE upper-division status and approval of chairperson.
Coreq.: TEMC 4801 and one of TEMC 3703, TEMC 3705, or TEMC 3706.

TEMC 3705 The Teaching of Science in the Middle School 3 s.h.
Using NSTA/NCATE and Ohio Model guidelines as a framework, students focus on establishing and maintaining learning environments that provide diverse students with a holistic, interdisciplinary understanding of science. Topics include goals formation, planning instruction, instructional strategies, resource selection, assessment procedures. Promotion of the use of science processes and problem-solving skills for life-long learning, the integration of science/technology/society. Field experience combining science pedagogy/methodology in a middle grades classroom.
Prereq.: TEMC 3702, 12 s.h. science, BCOE upper-division status, and approval of chairperson.
Coreq.: TEMC 4801 and one of TEMC 3703, TEMC 3704, or TEMC 3706.

TEMC 3706 Teaching Language Arts in the Middle School 3 s.h.
Integrated strategies for enabling diverse students to participate successfully in the activities of a literate society through listening, viewing, and communicating orally and in writing. Emphasis on integration of the language arts, higher order thinking skills, flexibility in applying the language arts in meaningful contexts across the curriculum.
Prereq.: TEMC 3702, BCOE upper-division status, and approval of chairperson.
Coreq.: TEMC 4801 and one of TEMC 3703, TEMC 3704, or TEMC 3705.

TEMC 3707 Science/Technology/Society 3 s.h.
In-depth exploration of science/technology/society connections. A subject matter-problem-solving-learning environment triad provides opportunities for study of real-life, personal, and societal science and technology problems. Field experience in which students assess STS problems, devise solutions, apply and evaluate knowledge for community improvement.
Prereq.: BCOE upper-division status, 12 s.h. science.

TEMC 4801 The Middle School Learning Community 3 s.h.
History, philosophy, and concepts of middle level education, including interdisciplinary instruction, collaborative teams, cooperative learning, classroom management, teacher-based advisory programs, flexible scheduling, cross-age grouping, departmentalized/core curriculum, adapting curriculum to the needs of culturally diverse populations, and working with families, resource persons, and community groups.
Prereq.: TEMC 3702, BCOE upper-division status, and approval of chairperson.
Coreq.: Two of TEMC 3703, TEMC 3704, TEMC 3705, or TEMC 3706.

TEMC 4802 Student Teaching: Middle Childhood 1-10 s.h.
Sixteen week supervised clinical teaching experience in licensure area. Provides candidate with opportunities to apply knowledge and skills, and display dispositions needed to effectively teach in diverse classrooms, CR/NC.
Prereq.: BCOE Upper-Division Status with a minimum overall GPA of 2.75, passing scores on OAE tests prior to the start of the student teaching semester, criminal background check, and successful completion of respective preclinical experience, with minimum content GPA of 2.67 and professional education GPA of 2.67.
Coreq.: TEMC 4803.
Gen Ed: Capstone.

TEMC 4803 Student Teaching Seminar for Middle Childhood Education 2 s.h.
Student Teaching seminar provides an opportunity to study relevant topics related to teaching and learning, application of professional and ethical practice and OSTP standards, research and theory, knowledge of learners, and reflection on practice. Completion of edTPA is required. CR/NC.
Prereq.: BCOE Upper-Division Status; Admission to Student Teaching in Middle Childhood Education.
Coreq.: TEMC 4802.
TEM 4804  Middle Level Instructional Design and Student Outcomes  3 s.h.
Prereq.: TERC 2601 or 2610 and TERG 3701 and 3702 and 3720.
Prereq.: 20 semester hours completed.

TERG 2601  Reading Application in Content Area Early Years  3 s.h.
Study of Ohio’s Learning Standards for English Language Arts, comprehension
skills, word attack skills, pre-reading strategies, and writing development
as they relate to early years reading in the content area. The role of early
childhood literacy development and literature in the early childhood content-
area classroom. Field hours required.
Prereq.: TERC 2600, BCOE upper division status, approval of chair.

Teacher Education Reading

TERG 2605  Reading Foundational Skills Across Content Areas Pre-K – 12  3 s.h.
A study of the development of Ohio Academic Content Area Standards,
comprehension skills, work attack skills, pre-reading strategies, study skills,
and writing development as they relate to reading in the content area. The role
of oral language and content literature in the early, middle, secondary,
multi-age, and special education content area classroom is included. Foundational
skills aligned to the scientifically based foundation in the cognitive, socio-
cultural, linguistic, and motivational influences on literacy and language
development are provided. Topics in the course include understanding
foundational literacy skills, strategies for building rich background knowledge,
relating lessons to research and best practices, and identifying how to address
individualized literacy needs across content areas.
Prereq.: Education major.

TERG 2610  Reading Application in Content Areas Middle Years  3 s.h.
Study of Ohio’s Learning Standards for English Language Arts, comprehension
skills, word attack skills, pre-reading strategies, and writing development as
they relate to middle years, multi-age and special education reading in the
content area. The role of literature in the content-area classroom. Field hours
required.
Prereq.: TERC 2600 or TERC 2610.

TERG 3700  Phonological Awareness and Phonics  3 s.h.
Phonics subject matter, instructional strategies and applications, and planning
for intensive, phonic-based word analysis in the early and middle stages of
literacy acquisition. Field hours required.
Prereq.: TERG 2605.

TERG 3701  Phonics in Reading Instruction  3 s.h.
Phonics subject matter, instructional strategies and applications, and planning
for intensive, phonic-based word analysis in the early and middle stages of
literacy acquisition. Field hours required.
Prereq.: TERG 2601 or TERG 2610.

TERG 3702  Developmental Reading Instruction  3 s.h.
The principles of teaching developmental reading in the elementary school.
Theories and related models of reading, various approaches to teaching
reading and creative, integrative literature strategies to meet the needs of
diverse learners. Field hours required.
Prereq.: TERG 2601 or TERG 2610.

TERG 3703  Assessment and Instruction in Reading  3 s.h.
Application and interpretation of selected formal and informal assessment
tools. Strategies for ensuring diverse students’ growth in reading and
the related language arts through ongoing assessment. Field hours required.
Prereq.: TERG 2601 or TERG 2610 and TERG 3701 and TERG 3702 and
admission to BCOE upper division status.

TERG 3711  Reading Application in Content Areas, Secondary Years  3 s.h.
Study of Ohio’s Learning Standards for English Language Arts, comprehension
skills, word attack skills, study skills, pre-reading strategies, and writing
development as they relate to content area reading in secondary years. The
role of literature in the content-area classroom. Field hours required.
Prereq.: 50 semester hours completed.

TERG 3720  Developmental Reading Instruction: Vocabulary, Comprehension,
and Reading  3 s.h.
The principles of teaching developmental reading in the elementary and middle
grades with emphasis on vocabulary, comprehension, and writing instruction.
Evidence-based strategies to meet the diverse learning needs of all students
are practiced. Field hours required.
Prereq.: TERG 2605.

TERG 3722  Organizing and Managing Diverse Literacy Environments  3 s.h.
An examination of the physical and social contexts of diverse literacy
environments that integrate foundational knowledge, cultural and linguistic
backgrounds, use of research-based instructional practices, curriculum
materials, and assessment-based decision-making.

TERG 3723  Literacy and Phonics Instruction  3 s.h.
An investigation of the philosophy, principles, and practices of reading
(including phonemic and phonetic developments) and language arts
instruction. An examination and application of formal and informal
assessment procedures as well as an investigation of the language learning
needs of diverse populations.

TERG 3724  Content Literacy  3 s.h.
An investigational of research-based philosophies, principles, and best
practice for applying content-specific concepts, vocabulary, and engagements
while using the language arts and study skills in ensure comprehending.

TERG 3725  Reading and Language Arts Assessment  3 s.h.
An examination and application of formal and informal assessment
procedures in reading and language arts including the use of background
information and discrete data. Data analysis, interpretation, and translations to
instruction are applied.

TERG 3726  Practicum: Coaching for Effective Literacy Instruction  3 s.h.
An application of literacy coach practices in assessment-based decision-
making, research-based instruction, and preparation and delivery of high-
quality professional development using techniques for working with individual
teachers in a coaching context and groups of teachers in whole-group PD
settings.

TERG 3727  Practicum: Case Study in Reading and Language Arts  3 s.h.
Application of previous course content involving supervised formal and
informal assessment of school-age pupils, developing an individualized
reading plan, selecting appropriate instructional practices and materials,
maintaining tutoring logs, developing a student portfolio, evaluating results of
instruction, and writing a case study report.
Prereq.: TERG 6926.

TERG 3728  The Reading and Language Arts Professional  3 s.h.
Investigation of theories and performance-based procedures for creating,
analyzing, guiding, and changing school- and system-wide reading and
language arts programs.
Prereq.: TERG 6926.
TERG 6973  Professional Development in Literacy  2 s.h.
An introduction to research and knowledge bases related to teacher professional development from a variety of perspectives. Examines coaching as one venue of supporting teacher professional development.
Prereq.: TERG 6972.

TERG 6974  Advanced Action Research in Literacy  2 s.h.
Intro to literacy research as an integral part of professional development. Builds candidate understanding of a variety of literacy research paradigms, supports engagement in inquiry to significantly advance candidates’ understanding of literacy, and provides opportunities for candidates to collaborate with other literacy professionals to advance understanding of evidence-based practice.
Prereq.: TERG 6973.

Teacher Education, Department of
TCED 1500  Introduction to Becoming a Teacher First Year Experience Course BCOE  3 s.h.
This course will focus on practical and academic preparation to enter the teaching profession, social and emotional wellness and academic support. Students will have an opportunity to explore the teaching profession. This course will examine various facets of preparing to teach in a diverse, 21st century classroom. The First Year Experience course will also teach first year students how to make informed decisions and successfully function in the university setting.

TCED 1501  Preparation for Praxis Core Mathematics  1 s.h.
A course designed to prepare students for professional-level standardized tests. Students will critically analyze the basic components of the Mathematics test for which they are preparing, including requirements, test formats, guideline for answering and scoring, and test-taking strategies, in conjunction with effective pedagogical procedures. One hour lecture, one hour lab.

TCED 1502  Preparation for Praxis Core Writing  1 s.h.
A course designed to prepare students for professional-level standardized tests. Students will critically analyze the basic components of the writing test for which they are preparing, including requirements, test formats, guideline for answering and scoring, and test-taking strategies, in conjunction with effective pedagogical procedures. One hour lecture, one hour lab.

TCED 1503  Preparation for Praxis Core Reading  1 s.h.
A course designed to prepare students for professional-level standardized tests. Students will critically analyze the basic components of the reading test for which they are preparing, including requirements, test formats, guideline for answering and scoring, and test-taking strategies, in conjunction with effective pedagogical procedures. One hour lecture, one hour lab. 1 s. h.

TCED 1509  Orientation to On-Line Learning  1 s.h.
This course provides an introduction and orientation to on-line learning, while acquainting students with the platform of BB9, distance education technologies, YSU and BCOE. CR/NC.
Coreq.: DE ECE 2629.

TCED 2600  Becoming an Education Professional  1 s.h.
The purpose of this course is to explore professionalism and ethics as they are related to the teaching profession: displaying professionalism, making responsible and ethical decisions, developing a professional identity, becoming a member of a learning community, and investigating contemporary ethical issues in education. Collegiality, professional behavior, use of social media, interpersonal communication skills, cultural bias, respect/rapport with students and families, will be discussed; ethical and professional dilemmas will be introduced. Field Hours Required.

TCED 2650  LGBTQ Issues in History and Popular Culture  3 s.h.
Explores the historical and present day representation of LGBT issues and individuals and their portrayal in popular culture.
Cross-listed: WMST 2650.
Gen Ed: Domestic Diversity, Social and Personal Awareness.

TERG 4800L  Laboratory Experience for Teaching All Learners  0 s.h.
Laboratory Experience for creating effective classroom environments that are developmentally appropriate, engaging, and integrate the use of technology to positively impact learning. Peer and clinical teaching designed to meet needs of all learners.
Coreq.: ECIS 4801 or ECIS 4802 or ECE 3713 or ECE 3715 or ECE 3780 or ECE 4814 or TEMC 3703 or TEMC 3704 or TEMC 3705 or TEMC 3706 or SED 4800C or SED 4800E or SED 4800M or SED 4800S or SPED 4854 or SPED 5835 or SPED 5864 or SPED 5851 or SPED 5868.

TCED 4830  Undergraduate Capstone Course for Education Majors  3 s.h.
Senior Seminar which substitutes for student teaching. This course requires a career/field component and research project. Placement is negotiated by the student with approval from course instructor.
Prereq.: Education major and junior standing.

TCED 5888  Topical Seminar  1-3 s.h.
Examination of issues related to the teaching of early childhood education, middle childhood education, special education, multi-age education, family and consumer vocational education, or adolescent/young adult education not covered in depth of other courses.
Prereq.: Admission to upper-division status in COE or admission to the School of Graduate Studies.

TCED 5888N  Topical Seminar Learning Abroad  1-3 s.h.
Examination of issues related to the teaching of early childhood education, middle childhood education, special education, multi-age education, family and consumer vocational education, or adolescent/young adult education not covered in depth of other courses. 1-3 s.h.
Prereq.: Admission to upper-division status in COE or admission to the School of Graduate Studies.

TCED 5888P  Topical Seminar Science Solar Cookers  1-3 s.h.
Examination of issues related to the teaching of early childhood education, middle childhood education, special education, multi-age education, family and consumer vocational education, or adolescent/young adult education not covered in depth of other courses.
Prereq.: Admission to upper-division status in COE or admission to the School of Graduate Studies.

Learning Outcomes
The learning outcomes for the Department of Teacher Education are to prepare 21st century classroom-ready teacher-candidates with the knowledge, skills, and dispositions to:

- Know and understand the content for which they have instructional responsibility
- Plan and deliver instruction that impacts the learning of all PK-12 students
- Use varied assessments to inform instruction
- Establish and maintain learning environments that ensure learning for all PK-12 students
- Collaborate and communicate with all stakeholders
- Accept the responsibility for professional growth, performance, and involvement as an individual and as a member or a learning community
- Expect that all teacher candidates will learn while modeling respect for PK-12 students’ diverse cultures

Bachelor of Science in Education in Integrated Language Arts (7-12) - Adolescent License

- Dr. Katie Cripe, Program Coordinator

OVERVIEW

- In cooperation with various academic disciplines in the University, the Department of Teacher Education and Leadership Studies offers a four-
year AYA Education Program (grades 7-12), Integrated Language Arts, approved by the Ohio Department of Education. The Integrated Language Arts license, Bachelor of Science in Education Degree requires a minimum of 127 semester hours of coursework including a semester of student teaching. Please refer to the four-year plan for additional information. This teaching license requires passage of the Ohio Assessments for Educators in order to be eligible to student teach.

EMPLOYMENT OPPORTUNITIES

- Graduates of the Adolescent/Young Adult Program will be qualified to teach in the 7-12 classroom. Additional opportunities may be available in the private sector to tutor students. It is recommended that students in this major consider adding the Teaching English to Speakers of Other Languages (TESOL) endorsement to increase marketability.
- Professional Dispositions:
  - In addition to the above learning outcomes, teacher candidates are expected to display the following professional dispositions:
  - Creating fairness in the classroom
  - Providing an inclusive environment that is safe and conducive to learning
  - Demonstrating the belief that all students can learn
  - Fostering collaborative relationships to support student learning and well-being
  - Exhibiting professional skills

FIELD EXPERIENCES AND STUDENT TEACHING

- Students complete over 120 hours of pre-clinical experiences, and additional field experiences, which are included in the following courses that offer opportunities to provide varying levels of classroom support (observing, one-on-one tutoring, small group teaching, co-teaching, whole class teaching).
- Field Experiences
- EDFN 1501 Introduction to Education
- EDFN 3708 Education and Society
- SPED 2630 Individuals with Exceptionalities in Society
- TERC 3711 Reading Application in Content Areas, Secondary Years
- SED 3706 Principles of Teaching Adolescents

Preclinical Field Experiences

The preclinical experience is conducted in local schools and provides an opportunity for teacher candidates to complete an in-depth field experience prior to student teaching. This field experience requires a substantial time commitment, as teacher candidates spend the entire day in schools during designated weeks. The Adolescent/Young Adult preclinical experience is scheduled during the fall semester. Applications for the preclinical experience must be submitted (1) one year in advance to BCOE Room 2101, by September 1 for the preclinical experience. Contact the Beeghly College of Education, academic advisors for minimum preclinical prerequisites.

- EDFN 3710 Educational Assessment
- SED 4800E English Methods for Adolescent and Young Adult Learners

Student Teaching

Students complete a 16 week student teaching experience. Students must pass the edTPA performance-based assessment with a minimum score of 37 during this experience.

- SED 4842 Supervised Student Teaching: High School
- SED 4842A Student Teaching Seminar for Secondary Education

ADVISEMENT

Advisement is provided by the academic advisors in the Beeghly College of Education. Majors in this program must complete general education requirements, subject area curriculum requirements, reading course requirements, and professional education requirements. Prior to student teaching, all adolescent/young adult majors must complete a preclinical experience.

REQUIRED ASSESSMENTS

The Ohio Assessments for Educators (OAE) assess the content area and professional (pedagogical) knowledge of candidates who are seeking initial Ohio educator license or adding a new licence area. The assessments are aligned with Ohio’s New Learning Standards. Teacher candidates must pass these exams prior to student teaching.

003 Assessment of Professional Knowledge Adolescence to Young Adult (7-12) (All AYA Teacher Candidates)

020 English Language Arts (for teacher candidates with ELA concentration)

ENDORSEMENTS

The following endorsements are available to individuals holding this teaching license and may increase marketability: K-12 TESOL Endorsement, K-12 Reading Endorsement.

COURSE | TITLE | S.H.
--- | --- | ---
**FIRST YEAR REQUIREMENT - STUDENT SUCCESS**
YSU 1500 or SS 1500 | Success Seminar | 1-2
or HONR 1500 | Strong Start Success Seminar | 1-2
Intro to Honors | 1-2

**General Education Requirements**

| COURSE | TITLE | S.H.
--- | --- | ---
ENGL 1550 or ENGL 1549 | Writing 1 | 3-4
or Writing 1 with Support | 3-4
ENGL 1551 | Writing 2 | 3
CMST 1545 | Communication Foundations | 3

**Mathematics Requirement**

| COURSE | TITLE | S.H.
--- | --- | ---
MATH 2623 | Quantitative Reasoning | 3
or MATH 2652 | Mathematics for Early Childhood Teachers 2 | 3

Some courses are categorized in more than one knowledge domain. Courses can only be used once within the General Education model. Courses listed for Knowledge Domains below are required in this program.

**Arts and Humanities (6 s.h.)**
These 6 s.h. may be met in the major if appropriate courses in the major are selected.

| COURSE | TITLE | S.H.
--- | --- | ---
Natural Sciences (2 courses, 1 with lab) | (6-7 s.h.) | 7
PSYC 1560 | General Psychology | 3
Social Science elective (or 3 s.h. requirement may be met by courses in major) | 3
Social and Personal Awareness (6 s.h.) | 6

**Major Requirements**

| COURSE | TITLE | S.H.
--- | --- | ---
ENGL 2631 | Mythology in Literature (AH) | 3
TCED 1500 | Introduction to Becoming a Teacher First Year Experience Course BCOE | 3
ENGL 2651 | Introduction to Language | 3
ENGL 3700 | Literary Study | 3
ENGL 3705 | Young Adult Literature | 3
ENGL 3710 | British Literature 1 | 3
ENGL 3711 | British Literature 2 | 3
ENGL 3712 | American Literature 1 | 3
ENGL 3713 | American Literature 2 | 3
ENGL 3741 | Advanced Writing for Teachers | 3
ENGL 4881  Shakespeare and His World 3
JOUR 4821  Advising Student Media 3

Select one of the following American Literature courses: 3
ENGL 3770  American Literature in Historical Perspective
ENGL 3780  American Genres
ENGL 4862  Themes in American Literature
ENGL 4864  American Literary Conversations
ENGL 4871  The Black Experience in American Literature

Select one of the following World/Multicultural Literature courses: 3
ENGL 2610  World Literature (AH/SPA)
ENGL 2617  Women in Literature (AH/SPA)
ENGL 2618  American Literature and Diversity (AH/SPA)
ENGL 2620  African Literature
ENGL 3732  Images of Women
ENGL 3738  Selected Topics in World Literature
ENGL 3790  Selected Topics in Multicultural Studies

Select one of the following Language/Linguistics courses: 3
ENGL 3750  Language and Culture
ENGL 3757  Development of the English Language
ENGL 4850  Sociolinguistics
ENGL 4851  Language Acquisition
ENGL 4855  Advanced Linguistics
ENGL 4858  English Grammar

Select one of the following Media Literacy courses: 3
TCOM 1595  Media Literacy and Culture
THTR 1590  History of Motion Pictures (AH)
ENGL 2665  Introduction to Film Study (AH)
ENGL 3743  Professional and Technical Writing

Select one of the following Upper Division British Literature courses: 3
ENGL 4830  Major Figures in British Literature
ENGL 4831  British Genres, Circles, and Movements
ENGL 4860  The Medieval World
ENGL 4882  The English Renaissance
ENGL 4886  Restoration and Eighteenth Century British Literature
ENGL 4887  The Romantic Period
ENGL 4892  Nineteenth Century British Literature Studies
ENGL 4895  Early Twentieth Century British Studies
ENGL 4896  British Literature from World War II to the Present

Select one of the following Advanced English Studies courses: 3
ENGL 3706  Introduction to Literary Theory
ENGL 4890  Senior Seminar

Select two of the following Oral Communication courses: 6
CMST 2655  Communication in Groups and Organizations
CMST 2656  Interpersonal Communication
THTR 2670  Oral Interpretation

Professional Education Curriculum
PSYC 3709  Psychology of Education 3
EDFN 1501  Introduction to Education 3
SPED 2630  Individuals with Exceptionalities in Society 1 3
TERG 3711  Reading Application in Content Areas, Secondary Years 1 2 3
EDFN 3708  Education and Society 3
SED 3706  Principles of Teaching Adolescents 2 3

Preclinical Curriculum
SED 4800E  English Methods for Adolescent and Young Adult Learners 2 3
EDFN 3710  Educational Assessment 3

Student Teaching Curriculum
SED 4842  Supervised Student Teaching: High School 2 10
SED 4842A  Student Teaching Seminar for Secondary Education 2 2

Total Semester Hours 134-136
1  Prerequisites for Preclinical Curriculum
2  Upper Division course

BCOE Notes:

Advisement:

• It is highly recommended that all teacher candidates meet with an academic advisor every semester.
• Freshmen, athletes, and students on warning and probation are required to meet with an advisor before registration.
• At the completion of 30 SH any teacher candidate who: 1) was required to and has not passed PRAXIS Core Exam(s), or 2) holds a GPA of 2.25 or below will be referred to Central Advising for advising and career services. If at a later date the teacher candidate passes all required parts of the Praxis Core Exam and attains a GPA of 2.25 or higher that student may return to BCOE for advising.

Important Notes:

• Neither admission to the University nor declaration of a major related to a teaching field guarantees admission to the BCOE's Teacher Education Programs or candidacy for a teaching license.
• Formal Admission to Teacher Education (Upper-Division) is required before teacher candidates are allowed to enroll in certain junior and senior level courses in BCOE.
• Undetermined education majors must declare a major before applying for admission to a Teacher Education Program.
• Admission to a Teacher Education Program is obtained upon satisfactory completion of the following requirements:
  _____ Minimum completion of 50 SH
  _____ Minimum 2.75 overall GPA
  • Meet one of the following criteria:
  _____ Overall GPA 3.4 or better, OR
  _____ ACT scores of Reading-21, English-18, Math-22, AND/OR
  _____ SAT scores of Reading-450, Writing-430, Math-520, AND/OR
  _____ Praxis CORE scores, Reading-156, Writing-162, Math-150

(Attach a copy of your CORE scores to the application)

• “B” average or better (A-C, B-B) for:
  _____ ENGL 1550_____ ENGL 1551

If failure to meet “B” average above must also complete:

______ ENGL 2601 grade of “B” or better. If you receive a “C” or below you will need to retake the course.

• “B” average or better (B-B-B, A-B-C) across the following:
  _____ EDFN 1501_____ CMST 1545
  _____ SPED 2630 _____ ENGL 3700

If student does not have a “B” average, student will be required to retake one or more of these courses until the “B” average is achieved.
A grade of “C” or better is required in all required major courses. Courses taken as “CR/NC” will not count towards the major.

Professional education and block courses may only be repeated one time.

Minimum requirements for teaching licenses are determined by the Ohio Department of Education; if those requirements change, they become effective immediately at Youngstown State University. (YSU Undergraduate Catalog).

Upper-Division Application Process

- Upper division application and forms must be submitted from the BCOE website.
- After completing a minimum of 50 SH, submit the following:
  - Upper Division application
  - Good Moral Character Statement
  - copy of BCI & FBI clearances
  - schedule an upper division interview with the BCOE Office of Student Services, room 2101, no later than:
- Upper Division Application Deadline
  - September 1—to register for Upper Division Courses for Spring
  - February 1—to register for Upper Division courses for Summer & Fall

Each completed application is reviewed and approved by the Upper Division Admission Committee. If all requirements are met, the teacher candidate may register for Upper Division courses for the following semester. Upper Division courses are the courses designated with the “+” symbol. Applications submitted after the deadline will not be processed until the end of the respective semester.

Program Notes:

- If Math concentration is chosen, Math GER is not required. If Science concentration is chosen, Natural Science GER is fulfilled through subject area curriculum. If Language Arts concentration is chosen, Arts & Humanities GER is fulfilled through subject area curriculum. If Social Studies concentration is chosen, Social Sciences GER is fulfilled through subject area curriculum.
- Candidates will not be permitted to take the following professional education courses more than twice: EDFN 1501, EDFN 3708, PSYC 3709, SPED 2630, TERG 2601, 3701, 3702, 3703, 2610, 3711, TEMC 4802, SED 4800, ECIS 2629, ECIS 3700, all preclinical experience courses, student teaching, and student teaching seminar.

- If the program is concerned regarding teacher candidate performance in the preclinical experience, as determined by CPAST criteria, the program coordinator may require the teacher candidate to complete an additional preclinical experience prior to the student teaching experience.

Preclinical Application with Request for Graduation Evaluation

- Preclinical application is completed on TaskStream. Directions are available on the BCOE website.
- Preclinical application and graduation evaluation request must be submitted one year prior to the intended preclinical semester no later than:
  - September 1—for Fall preclinical
  - February 1—for Spring preclinical
- Preclinical candidates are screened for eligibility based on GPA and course completion.

Student Teaching:

- Prerequisites:
  - BCOE Upper Division and Senior status,
  - Overall 2.75 GPA
  - Minimum of 2.67 GPA in subject area curriculum and professional education courses with no grade less than a “C” (each computed individually).
  - Passage of OAE test(s) and ACTFL tests for foreign language.

  - Instructions for completing the Student Teaching Application and Forms are available on BCOE website. The application and forms must be completed and printed from the BCOE website and submitted to the BCOE Office of Student Services no later than:
  - September 1—to Student Teach the following Spring Semester
  - February 1—to Student Teach the following Fall Semester

Graduation Process:

- Apply for graduation during the first three weeks of the semester you plan to graduate. Graduation evaluation must be completed in advance of application for graduation.

Completing a Bachelor of Science in Education without Licensure:

- Teacher candidates who choose to graduate without licensure must apply for approval in the BCOE Office of Student Services.
- Once approved, teacher candidates graduating without licensure must take TCED 4830 (3 SH) capstone in place of student teaching.

Year 1

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<th>Course Title</th>
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<td>YSU 1500</td>
<td>Success Seminar</td>
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<td>ENGL 1550</td>
<td>Writing 1</td>
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<td>or ENGL 1549</td>
<td>Writing 1 with Support</td>
<td>3-4</td>
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<td>PSYC 1560</td>
<td>General Psychology</td>
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<td>Mythology in Literature</td>
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<td>Quantitative Reasoning</td>
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<td>Individuals with Exceptionalities in Society</td>
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<td>Natural Science/Lab GER</td>
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<td>ENGL World Multiculture Literature Elective</td>
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Year 2

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Year 3

<table>
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<tr>
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<tr>
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<td>ENGL 3711</td>
<td>British Literature 2</td>
<td>3</td>
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</table>
Learning Outcomes

The following learning outcomes are based on The Ohio Standards for the Teaching Profession. These standards were developed for use as a guide for teachers as they continually reflect upon and improve their effectiveness as educators throughout all of the stages of their careers. These standards serve as an important tool for teachers as they consider their growth and development in the profession. These standards in developing and content of our teacher education programs. They are interrelated and connect in teachers’ practice.

- Teachers understand student learning and development and respect the diversity of the students they teach.
- Teachers know and understand the content area for which they have instructional responsibility.
- Teachers understand and use varied assessments to inform instruction, evaluate and ensure student learning.
- Teachers plan and deliver effective instruction that advances the learning of each individual student.
- Teachers create learning environments that promote high levels of learning and achievement for all students.
- Teachers assume responsibility for professional growth, performance and involvement as an individual and as a member of a learning community.
- Teachers collaborate and communicate with students, parents, other educators, administrators and the community to support student learning. Teachers assume responsibility for professional growth, performance and involvement as an individual and as a member of a learning community.

Bachelor of Science in Education in Integrated Mathematics (7-12) - Adolescent License

Dr. Katie Cripe, Program Coordinator

OVERVIEW

In cooperation with various academic disciplines in the University, the Department of Teacher Education and Leadership Studies offers a four-year AYA Education Program (grades 7-12). Integrated Mathematics, approved by the Ohio Department of Education. The Integrated Mathematics license, Bachelor of Science in Education Degree requires a minimum of 121 semester hours of coursework including a semester of student teaching. Please refer to the four-year plan for additional information. This teaching license requires passage of the Ohio Assessments for Educators in order to be eligible to student teach.

EMPLOYMENT OPPORTUNITIES

Graduates of the Adolescent/Young Adult Program will be qualified to teach in the 7-12 classroom. Additional opportunities may be available in the private sector to tutor students. It is recommended that students in this major consider adding the Teaching English to Speakers of Other Languages (TESOL) endorsement to increase marketability.

Professional Dispositions:

- Creating fairness in the classroom
- Providing an inclusive environment that is safe and conducive to learning
- Demonstrating the belief that all students can learn
- Fostering collaborative relationships to support student learning and well-being
- Exhibiting professional skills

FIELD EXPERIENCES AND STUDENT TEACHING

Students complete over 120 hours of pre-clinical experiences in ad Field experiences are included in the following courses and offer opportunities to provide varying levels of classroom support (observing, one-on-one tutoring, small group teaching, co-teaching, whole class teaching).

Field Experiences

- EDFN 1501 Introduction to Education
- EDFN 3708 Education and Society
- SPED 2630 Individuals with Exceptionalities in Society
- TERG 3711 Reading Application in Content Areas, Secondary Years
- SED 3706 Principles of Teaching Adolescents

Preclinical Field Experiences:

The preclinical experience is conducted in local schools and provides an opportunity for teacher candidates to complete an in-depth field experience prior to student teaching. This field experience requires a substantial time commitment, as teacher candidates spend the entire day in schools during designated weeks. The Adolescent/Young Adult preclinical experience is scheduled during the fall semester. Applications for the preclinical experience must be submitted (1) one year in advance to BCOE Room 2101, by September 1 for the preclinical experience. Contact the Beeghly College of Education, academic advisors for minimum preclinical prerequisites.

- EDFN 3710 Educational Assessment
**Endorsements**

The following endorsements are available to individuals holding this teaching license and may increase marketability: K-12 TESOL Endorsement, K-12 Reading Endorsement.

**Required Assessments**

The Ohio Assessments for Educators (OAE) assess the content area and professional (pedagogical) knowledge of candidates who are seeking initial Ohio educator license or adding a new license area. The assessments are aligned with Ohio’s New Learning Standards. Teacher candidates must pass these exams prior to student teaching.

**Advisement**

Advisement is provided by the academic advisors in the Beeghly College of Education. Majors in this program must complete general education requirements, subject area curriculum requirements, reading course requirements, and professional education requirements. Prior to student teaching, all adolescent/young adult majors must complete a preclinical experience.

**Subject Area Curriculum**

<table>
<thead>
<tr>
<th>Course Code</th>
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<tbody>
<tr>
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<tr>
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<tr>
<td>MATH 3715</td>
<td>Discrete Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 3720</td>
<td>Linear Algebra and Matrix Theory</td>
<td>3</td>
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<tr>
<td>MATH 3721</td>
<td>Abstract Algebra 1</td>
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<td>STAT 3743</td>
<td>Probability and Statistics</td>
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<tr>
<td>MATH 3750</td>
<td>History of Mathematics</td>
<td>3</td>
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<tr>
<td>MATH 3751</td>
<td>Real Analysis 1</td>
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<tr>
<td>MATH 4830</td>
<td>Foundations of Geometry</td>
<td>3</td>
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<tr>
<td>MATH 4896</td>
<td>Senior Undergraduate Research Project</td>
<td>2</td>
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<tr>
<td>MATH 4832</td>
<td>Euclidean Transformations</td>
<td>3</td>
</tr>
<tr>
<td>CSIS 2610</td>
<td>Programming and Problem-Solving</td>
<td>4</td>
</tr>
</tbody>
</table>

Select one of the following MATH electives:

- MATH 3702 Problem Solving Seminar for Secondary Mathematics 3
- MATH 3705 Differential Equations 3
- MATH 4822 Abstract Algebra 2 3
- MATH 5828 Number Theory 3
- MATH 5835 Introduction to Combinatorics and Graph Theory 3
- MATH 5845 Operations Research 3
- MATH 5895 Selected Topics in Mathematics 3

**Professional Education Curriculum**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 3709</td>
<td>Psychology of Education</td>
<td>3</td>
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<tr>
<td>EDFN 1501</td>
<td>Introduction to Education</td>
<td>3</td>
</tr>
<tr>
<td>SPED 2630</td>
<td>Individuals with Exceptionalities in Society</td>
<td>3</td>
</tr>
<tr>
<td>EDFN 3706</td>
<td>Principles of Teaching Adolescents 2</td>
<td>3</td>
</tr>
<tr>
<td>TERG 3711</td>
<td>Reading Application in Content Areas, Secondary Years 4</td>
<td>3</td>
</tr>
<tr>
<td>EDFN 3708</td>
<td>Education and Society</td>
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**Preclinical Curriculum**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>SED 4800M</td>
<td>Mathematics Methods for Adolescent and Young Adult Learners 2</td>
<td>3</td>
</tr>
<tr>
<td>EDFN 3710</td>
<td>Educational Assessment</td>
<td>3</td>
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</table>

**Student Teaching Curriculum**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
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</tr>
</thead>
<tbody>
<tr>
<td>SED 4842</td>
<td>Supervised Student Teaching: High School 2</td>
<td>10</td>
</tr>
<tr>
<td>SED 4842A</td>
<td>Student Teaching Seminar for Secondary Education 2</td>
<td>2</td>
</tr>
</tbody>
</table>

Total Semester Hours for the Degree: 121 s.h.

**Endorsements**

- SED 4800C Science Methods for Adolescent and Young Adult Learners
- Or
- SED 4800E English Methods for Adolescent and Young Adult Learners
- Or
- SED 4800M Mathematics Methods for Adolescent and Young Adult Learners
- Or
- SED 4800S Social Studies Methods for Adolescent and Young Adult Learners

**Student Teaching**

Students complete a 16 week student teaching experience. Students must pass the edTPA performance-based assessment with a minimum score of 37 during this experience.

- SED 4842 Supervised Student Teaching: High School
- SED 4842A Student Teaching Seminar for Secondary Education

**Advisement**

Advisement is provided by the academic advisors in the Beeghly College of Education. Majors in this program must complete general education requirements, subject area curriculum requirements, reading course requirements, and professional education requirements. Prior to student teaching, all adolescent/young adult majors must complete a preclinical experience.

**Required Assessments**

The Ohio Assessments for Educators (OAE) assess the content area and professional (pedagogical) knowledge of candidates who are seeking initial Ohio educator license or adding a new license area. The assessments are aligned with Ohio’s New Learning Standards. Teacher candidates must pass these exams prior to student teaching.

003 Assessment of Professional Knowledge Adolescence to Young Adult (7-12) (All AYA Teacher Candidates)

020 English Language Arts (for teacher candidates with ELA concentration)

027 Mathematics (for teacher candidates with Math concentration)

024 Integrated Science (for teacher candidates with Science concentration)

025 Integrated Social Studies (for teacher candidates with Social Studies concentration)

**Endorsements**

The following endorsements are available to individuals holding this teaching license and may increase marketability: K-12 TESOL Endorsement, K-12 Reading Endorsement.

**Course** | **Title** | **S.H.**
--- | --- | ---
YSU 1500 | Success Seminar | 1-2
or SS 1500 | Strong Start Success Seminar | 1-2
or HONR 1500 | Intro to Honors | 1-2

**General Education Requirements**

<table>
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<tr>
<th>Course Code</th>
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<tbody>
<tr>
<td>ENGL 1550</td>
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<td>or ENGL 1549</td>
<td>Writing 1 with Support</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 1551</td>
<td>Writing 2</td>
<td>3</td>
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</tbody>
</table>

**Advisement**

Advisement is provided by the academic advisors in the Beeghly College of Education. Majors in this program must complete general education requirements, subject area curriculum requirements, reading course requirements, and professional education requirements. Prior to student teaching, all adolescent/young adult majors must complete a preclinical experience.

**Required Assessments**

The Ohio Assessments for Educators (OAE) assess the content area and professional (pedagogical) knowledge of candidates who are seeking initial Ohio educator license or adding a new license area. The assessments are aligned with Ohio’s New Learning Standards. Teacher candidates must pass these exams prior to student teaching.

003 Assessment of Professional Knowledge Adolescence to Young Adult (7-12) (All AYA Teacher Candidates)

020 English Language Arts (for teacher candidates with ELA concentration)

027 Mathematics (for teacher candidates with Math concentration)

024 Integrated Science (for teacher candidates with Science concentration)

025 Integrated Social Studies (for teacher candidates with Social Studies concentration)
• It is highly recommended that all teacher candidates meet with an academic advisor every semester.
• Freshmen, athletes, and students on warning and probation are required to meet with an advisor before registration.
• At the completion of 30 SH any teacher candidate who: 1) was required to and has not passed PRAXIS Core Exam(s), or 2) holds a GPA of 2.25 or below will be referred to Central Advising for advising and career services. If at a later date the teacher candidate passes all required parts of the Praxis Core Exam and attains a GPA of 2.25 or higher that student may return to BCOE for advising.

Important Notes:
• Neither admission to the University nor declaration of a major related to a teaching field guarantees admission to the BCOE’s Teacher Education Programs or candidacy for a teaching license.
• Formal Admission to Teacher Education (Upper-Division) is required before teacher candidates are allowed to enroll in certain junior and senior level courses in BCOE.
• Undetermined education majors must declare a major before applying for admission to a Teacher Education Program.
• Admission to a Teacher Education Program is obtained upon satisfactory completion of the following requirements:
  ____ Minimum completion of 50 SH
  ____ Minimum 2.75 overall GPA
  ____ Meet one of the following criteria:
    ____ Overall GPA 3.4 or better, OR
    ____ ACT scores of Reading-21, English-18, Math-22, AND/OR
    ____ SAT scores of Reading-450, Writing-430, Math-520, AND/OR
    ____ Praxis CORE scores, Reading-156, Writing-162, Math-150

(Attach a copy of your CORE scores to the application)
• “B” average or better (A-C, B-B) for:
  ____ ENGL 1550, ENGL 1551
If failure to meet “B” average above must also complete:
  ____ ENGL 2601 grade of “B” or better. If you receive a “C” or below you will need to retake the course.
• “B” average or better (B-B-B, A-B-C) across the following:
  ____ EDFN 1501, CMST 1545
  ____ SPED 2630, MATH 3715
If student does not have a “B” average, student will be required to retake one or more of these courses until the “B” average is achieved.
• A grade of "C" or better is required in all required major courses. Courses taken as "CR/NC" will not count towards the major
• Professional education and block courses may only be repeated one time.
• Minimum requirements for teaching licenses are determined by the Ohio Department of Education; if those requirements change, they become effective immediately at Youngstown State University. (YSU Undergraduate Catalog).

Upper-Division Application Process
• Upper division application and forms must be printed from the BCOE website.
• After completing a minimum of 50 SH, submit the following:
  ____ Upper Division application
  ____ Good Moral Character Statement
  ____ copy of BCI & FBI clearances
  ____ schedule an upper division interview with the BCOE Office of Student Services, room 2101, no later than:
  ____ Upper Division Application Deadline
    • September 1 — to register for Upper Division Courses for Spring
    • February 1 — to register for Upper Division courses for Summer & Fall
  • Each completed application is reviewed and approved by the Upper Division Admission and Retention Committee. If all requirements are met, the teacher candidate may register for Upper Division courses for the following semester. Upper Division courses are the courses designated with the “*” symbol. Applications submitted after the deadline will not be processed until the end of the respective semester.

Program Notes:
• If Math concentration is chosen, Math GER is not required. If Science concentration is chosen, Natural Science GER is fulfilled through subject area curriculum. If Language Arts concentration is chosen, Arts & Humanities GER is fulfilled through subject area curriculum. If Social Studies concentration is chosen, Social Sciences GER is fulfilled through subject area curriculum.
• Candidates will not be permitted to take the following professional education courses more than twice: EDFN 1501, EDFN 3708, PSYC 3709, SPED 2630, TERG 2601, 3701, 3702, 3703, 2610, 3711, TECM 4802, SED 4800, ECIS 2629, ECIS 3700, all preclinical experience courses, student teaching, and student teaching seminar.
• If the program is concerned regarding teacher candidate performance in the preclinical experience, as determined by CPAST criteria, the program coordinator may require the teacher candidate to complete an additional preclinical experience prior to the student teaching experience.

Preclinical Application with Request for Graduation Evaluation
• Preclinical application is completed on TaskStream. Directions are available on the BCOE website.
• Preclinical application and graduation evaluation request must be submitted one year prior to the intended preclinical semester no later than:
    • September 1 — for Fall preclinical
    • February 1 — for Spring preclinical
• Preclinical candidates are screened for eligibility based on GPA and course completion.

Student Teaching:
• Prerequisites:
  ____ BCOE Upper Division and Senior status,
  ____ Overall 2.75 GPA
  ____ Minimum of 2.67 GPA in subject area curriculum and professional education courses with no grade less than a “C” (each computed individually),
  ____ Passage of OAE test(s) and ACTFL tests for foreign language.
• Instructions for completing the Student Teaching Application and Forms are available on BCOE website. The application and forms must be completed and printed from the BCOE website and submitted to the BCOE Office of Student Services no later than:
    • September 1 — to Student Teach the following Spring Semester
    • February 1 — to Student Teach the following Fall Semester

Graduation Process:
Completing a Bachelor of Science in Education without Licensure:

- Teacher candidates who choose to graduate without licensure must apply for approval in the BCOE Office of Student Services.
- Once approved, teacher candidates graduating without licensure must take TCED 4830 (3 SH) capstone in place of student teaching.

### Year 1

<table>
<thead>
<tr>
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<th>Course Title</th>
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<td>or ENGL 1549</td>
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<td>MATH 1571</td>
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<td>PSYC 1560</td>
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<td>TCED 1500</td>
<td>Introduction to Becoming a Teacher First Year Experience Course BCOE</td>
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**Semester Hours: 17-18**

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<td>Writing 2</td>
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<td>MATH 1572</td>
<td>Calculus 2</td>
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<td>SPED 2630</td>
<td>Individuals with Exceptionalities in Society</td>
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<td></td>
<td>Arts and Humanities GER</td>
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**Semester Hours: 16**

### Year 2

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<td>CMST 1545</td>
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**Semester Hours: 13**

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<td>Foundations of Geometry</td>
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<td>STAT 3743</td>
<td>Probability and Statistics</td>
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<td>CSIS 2610</td>
<td>Programming and Problem-Solving</td>
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<td>PSYC 3709</td>
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**Semester Hours: 17**

### Year 3

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<td>MATH 3721</td>
<td>Abstract Algebra 1</td>
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<td>Natural Sciences GER</td>
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**Semester Hours: 16**

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<td>SED 3706</td>
<td>Principles of Teaching Adolescents</td>
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<td></td>
<td>TERG 3711</td>
<td>Reading Application in Content Areas, Secondary Years</td>
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<td></td>
<td>Natural Science/Lab GER</td>
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<td></td>
<td>Social and Personal Awareness GER</td>
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**Semester Hours: 16**

### Year 4

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<tr>
<td>Fall</td>
<td>EDFN 3710</td>
<td>Educational Assessment</td>
<td>3</td>
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<td></td>
<td>MATH 4896</td>
<td>Senior Undergraduate Research Project</td>
<td>2</td>
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<td></td>
<td>SED 4800M</td>
<td>Mathematics Methods for Adolescent and Young Adult Learners</td>
<td>3</td>
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<td></td>
<td>MATH 3751</td>
<td>Real Analysis 1</td>
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<tr>
<td></td>
<td>MATH 4832</td>
<td>Euclidean Transformations</td>
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**Semester Hours: 15**

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<th>Semester</th>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>Spring</td>
<td>SED 4842</td>
<td>Supervised Student Teaching: High School</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>SED 4842A</td>
<td>Student Teaching Seminar for Secondary Education</td>
<td>2</td>
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</tbody>
</table>

**Semester Hours: 12**

**Total Semester Hours: 122-123**

### Learning Outcomes

The following learning outcomes are based on The Ohio Standards for the Teaching Profession. These standards were developed for use as a guide for teachers as they continually reflect upon and improve their effectiveness as educators throughout all of the stages of their careers. These standards serve as an important tool for teachers as they consider their growth and development in the profession. These standards in developing and content of our teacher education programs. They are interrelated and connect in teachers’ practice.

- Teachers understand student learning and development and respect the diversity of the students they teach.
- Teachers know and understand the content area for which they have instructional responsibility.
- Teachers understand and use varied assessments to inform instruction, evaluate and ensure student learning.
- Teachers plan and deliver effective instruction that advances the learning of each individual student.
- Teachers create learning environments that promote high levels of learning and achievement for all students.
- Teachers assume responsibility for professional growth, performance and involvement as an individual and as a member of a learning community.
- Teachers collaborate and communicate with students, parents, other educators, administrators and the community to support student learning. Teachers assume responsibility for professional growth, performance and involvement as an individual and as a member of a learning community.

### Bachelor of Science in Education in Integrated Sciences (7-12) - Adolescent License, Biology Concentration

**Dr. Katie Cripe, Program Coordinator**

**OVERVIEW**

In cooperation with various academic disciplines in the University, the Department of Teacher Education and Leadership Studies offers a four-year AYA Education Program (grades 7-12), Integrated Sciences/Biology Concentration, approved by the Ohio Department of Education. The AYA Integrated Sciences License, Grades 7-12 (Biology) as the primary concentration), Bachelor of Science in Education degree requires a minimum of 148-151 semester hours of course work. The Integrated Sciences license qualifies the license holder to teach all areas of science (Biology, Chemistry,
Earth/Space, and Physics). This teaching field requires passage of the Ohio Assessments for Educators in order to be eligible to student teach.

**EMPLOYMENT OPPORTUNITIES**

Graduates of the Adolescent/Young Adult Program will be qualified to teach in the 7-12 classroom. Additional opportunities may be available in the private sector to tutor students.

Professional Dispositions:

In addition to the above learning outcomes, teacher candidates are expected to display the following professional dispositions:

- Creating fairness in the classroom
- Providing an inclusive environment that is safe and conducive to learning
- Demonstrating the belief that all students can learn
- Fostering collaborative relationships to support student learning and well-being
- Exhibiting professional skills

**FIELD EXPERIENCES AND STUDENT TEACHING**

Students complete a number of field experiences to support the learning of content and best practices of teaching. Field experiences offer opportunities to provide varying levels of classroom support (observing, one-on-one tutoring, small group teaching, co-teaching, whole class teaching).

Preclinical Field Experience

The preclinical experience is conducted in local schools and provides an opportunity for teacher candidates to complete an in-depth field experience prior to student teaching. This field experience requires a substantial time commitment, as teacher candidates spend the entire day in schools during designated weeks. The Adolescent/Young Adult preclinical experience is scheduled during the fall semester. Applications for the preclinical experience must be submitted to the Office of Student Field Experience one year in advance (September 1).

- EDFN 3710 Educational Assessment
- And
- SED 4800C Science Methods for Adolescent and Young Adult Learners

Student Teaching

Students complete a 16 week student teaching experience. Students must pass the edTPA performance-based assessment with a minimum score of 37 during this experience.

- SED 4842 Supervised Student Teaching: High School
- And
- SED 4842A Student Teaching Seminar for Secondary Education

**ADVISEMENT**

Advisement is provided by the academic advisors in the Beechly College of Education. Majors in this program must complete general education requirements, subject area curriculum requirements, reading course requirements, and professional education requirements. Prior to student teaching, all adolescent/young adult majors must complete a preclinical experience.

**REQUIRED ASSESSMENTS**

The Ohio Assessments for Educators (OAE) assesses the content area and professional (pedagogical) knowledge of candidates who are seeking initial Ohio educator license or adding a new license area. The assessments are aligned with Ohio’s New Learning Standards. Teacher candidates must pass these exams prior to student teaching.

003 Assessment of Professional Knowledge Adolescence to Young Adult (7-12) (All AYA Teacher Candidates)

**024 Integrated Science (for teacher candidates with Science concentration)**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
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<tbody>
<tr>
<td>YSU 1500</td>
<td>Success Seminar</td>
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<td>or SS 1500</td>
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<td>or HONR 1500</td>
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<td>ENGL 1550</td>
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<td>or ENGL 1549</td>
<td>Writing 1 with Support</td>
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<td>ENGL 1551</td>
<td>Writing 2</td>
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<td>CMST 1545</td>
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<tr>
<td>MATH 1571</td>
<td>Calculus 1</td>
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</table>

Some courses are categorized in more than one knowledge domain. Courses can only be used once within the General Education model. Some majors prescribe specific GE courses. If a course has been added to the domains, it is required.

**Arts and Humanities**

- Natural Sciences (2 courses, 1 lab) 7

This requirement met by courses in major

- Social Science 6
- Social Science GER
- PSYC 1560 General Psychology
- Social and Personal Awareness 6

**Subject Area Curriculum**

- TCED 1500 Introduction to Becoming a Teacher First Year Experience Course BCOE 3
- MATH 1572 Calculus 2 4
- Biology Concentration

Both of the following:

- BIOL 2601 & 2601L General Biology: Molecules and Cells and General Biology: Molecules and Cells Laboratory 4
- BIOL 2602 & 2602L General Biology: Organisms and Ecology and General Biology: Organisms and Ecology Laboratory 4

Select 14 s.h. from the following BIOL electives: 14

- BIOL 3741 Animal Diversity and Animal Diversity Laboratory
- BIOL 3741L Animal Diversity and Animal Diversity Laboratory
- BIOL 3702 Microbiology and Microbiology Laboratory
- BIOL 3702L Microbiology and Microbiology Laboratory
- BIOL 3721 Genetics
- BIOL 3762 Field Botany and Field Botany Laboratory
- BIOL 3762L Field Botany and Field Botany Laboratory
- BIOL 3759 Evolution
- BIOL 4890 & 4890L Molecular Genetics and Molecular Genetics Laboratory
- BIOL 3730 Human Physiology and Human Physiology Laboratory
- BIOL 3730L Human Physiology and Human Physiology Laboratory

If primary science concentration is Biology, then take the following:

- CHEM 1515 & 1515L General Chemistry 1 and General Chemistry 1 Laboratory 4
- CHEM 1516 & 1516L General Chemistry 2 and General Chemistry 2 Laboratory 4
- CHEM 3719 & 3719L Organic Chemistry 1 and Organic Chemistry 1 Laboratory 4
It is highly recommended that all teacher candidates meet with an academic advisor every semester.

- Freshmen, athletes, and students on warning and probation are required to meet with an advisor before registration.

Minimum Total Hours Required for the Degree: 148-151 s.h.

- At the completion of 30 SH any teacher candidate who: 1) was required to and has not passed PRAXIS Core Exam(s), or 2) holds a GPA of 2.25 or below will be referred to Central Advising for advising and career services.

If at a later date the teacher candidate passes all required parts of the Praxis Core Exam and attains a GPA of 2.25 or higher that student may return to BCOE for advising.

Important Notes:

- Neither admission to the University nor declaration of a major related to a teaching field guarantees admission to the BCOE’s Teacher Education Programs or candidacy for a teaching license.

- Formal Admission to Teacher Education (Upper-Division) is required before teacher candidates are allowed to enroll in certain junior and senior level courses in BCOE.

- Undetermined education majors must declare a major before applying for admission to a Teacher Education Program.

- Admission to a Teacher Education Program is obtained upon satisfactory completion of the following requirements:

- Minimum completion of 50 SH

- Minimum 2.75 overall GPA

- Meet one of the following criteria:

  - Overall GPA 3.4 or better; OR
  - ACT scores of Reading-21, English-18, Math-22, AND/OR
  - SAT scores of Reading-450, Writing-430, Math-520, AND/OR
  - Praxis CORE scores, Reading-156, Writing-162, Math-150

(Attach a copy of your CORE scores to the application)

- "B" average or better (A-C, B-B) for:

  - ENGL 1550

If failure to meet "B" average above must also complete:

- ENGL 2601 grade of "B" or better.

- Minimum completion of 50 SH

If you receive a "C" or below you will retake one or more of these courses until the "B" average is achieved.

- A grade of "C" or better is required in all required major courses. Courses taken as "CR/NC" will not count towards the major.

- Professional education and block courses may only be repeated one time.

- Minimum requirements for teaching licenses are determined by the Ohio Department of Education; if those requirements change, they become effective immediately at Youngstown State University (YSU Undergraduate Catalog).

Upper-Division Application Process

- Upper division application and forms must be printed from the BCOE website.

- After completing a minimum of 50 SH, submit the following:

  - Upper Division application
  - Good Moral Character Statement
  - copy of BCI & FBI clearances

BCOE Notes:

Advisement:

- It is highly recommended that all teacher candidates meet with an academic advisor every semester.

- Freshmen, athletes, and students on warning and probation are required to meet with an advisor before registration.
• schedule an upper division interview with the BCOE Office of Student Services, room 2101, no later than:

  • Upper Division Application Deadline
    • September 1—to register for Upper Division Courses for Spring
    • February 1—to register for Upper Division courses for Summer & Fall
  
  • Each completed application is reviewed and approved by the Upper Division Admission and Retention Committee. If all requirements are met, the teacher candidate may register for Upper Division courses for the following semester. Upper Division courses are the courses designated with the “+” symbol. Applications submitted after the deadline will not be processed until the end of the respective semester.

Program Notes:

• If Math concentration is chosen, Math GER is not required. If Science concentration is chosen, Natural Science GER is fulfilled through subject area curriculum. If Language Arts concentration is chosen, Arts & Humanities GER is fulfilled through subject area curriculum. If Social Studies concentration is chosen, Social Sciences GER is fulfilled through subject area curriculum.

• Candidates will not be permitted to take the following professional education courses more than twice: EDFN 1501, EDFN 3708, PSYC 3709, SPED 2630, TERG 2601, 3701, 3702, 3703, 2610, 3711, TEMC 4802, SED 4800, ECIS 2629, ECIS 3700, all preclinical experience courses, student teaching, and student teaching seminar.

• If the program is concerned regarding teacher candidate performance in the preclinical experience, as determined by CPAS criteria, the program coordinator may require the teacher candidate to complete an additional preclinical experience prior to the student teaching experience.

Preclinical Application with Request for Graduation Evaluation

• Preclinical application is completed on TaskStream. Directions are available on the BCOE website.

• Preclinical application and graduation evaluation request must be submitted one year prior to the intended preclinical semester no later than:
  • September 1—for Fall preclinical
  • February 1—for Spring preclinical

• Preclinical candidates are screened for eligibility based on GPA and course completion.

Student Teaching:

• Prerequisites:
  • BCOE Upper Division and Senior status,
  • Overall 2.75 GPA
  • Minimum of 2.67 GPA in subject area curriculum and professional education courses with no grade less than a “C” (each computed individually),
  • Passage of OAE test(s) and ACTFL tests for foreign language.

• Instructions for completing the Student Teaching Application and Forms are available on BCOE website. The application and forms must be completed and printed from the BCOE website and submitted to the BCOE Office of Student Services no later than:
  • September 1—to Student Teach the following Spring Semester
  • February 1—to Student Teach the following Fall Semester

Graduation Process:

• Apply for graduation during the first three weeks of the semester you plan to graduate. Graduation evaluation must be completed in advance of application for graduation.

Completing a Bachelor of Science in Education without Licensure:

• Teacher candidates who choose to graduate without licensure must apply for approval in the BCOE Office of Student Services.

  • Once approved, teacher candidates graduating without licensure must take TCED 4830 (3 SH) capstone in place of student teaching.

Year 1

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| Semester Hours | 19 |

Spring

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Year 2

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<td>GEOL 1505 &amp; 1505L</td>
<td>Physical Geology and Physical Geology Laboratory 4</td>
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<td>Biology Elective</td>
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<td>SPED 2630</td>
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| Semester Hours | 19 |

Spring

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<td>Earth/Space Science Elective</td>
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| Semester Hours | 21 |

Year 3

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<td>Weather 3</td>
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<td>GEOL 2602</td>
<td>Introduction to Oceanography 3</td>
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<td>Biology Elective</td>
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<td>Physics Elective</td>
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| Semester Hours | 19-20 |

Spring

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<td>EDFN 3708</td>
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Concentration in Integrated Sciences (7-12) - Bachelor of Science in Education

In cooperation with various academic disciplines in the University, the Department of Teacher Education and Leadership Studies offers a four-year AYA Education Program (grades 7-12), Integrated Sciences/Chemistry Concentration, approved by the Ohio Department of Education. The AYA Integrated Sciences License, Grades 7-12 (Chemistry as the primary concentration), Bachelor of Science in Education degree requires a minimum of 146-149 semester hours of course work. The Integrated Science license qualifies the license holder to teach all areas of science (Biology, Chemistry, Earth/Space, and Physics). This teaching license requires passage of the Ohio Assessments for Educators in order to be eligible to student teach.

EMPLOYMENT OPPORTUNITIES

Graduates of the Adolescent/Young Adult Program will be qualified to teach in the 7-12 classroom. Additional opportunities may be available in the private sector to tutor students.

Professional Dispositions:

In addition to the above learning outcomes, teacher candidates are expected to display the following professional dispositions:

• Creating fairness in the classroom
• Providing an inclusive environment that is safe and conducive to learning
• Demonstrating the belief that all students can learn
• Fostering collaborative relationships to support student learning and well-being
• Exhibiting professional skills

FIELD EXPERIENCES AND STUDENT TEACHING

Students complete a number of field experiences to support the learning of content and best practices of teaching. Field experiences offer opportunities to provide varying levels of classroom support (observing, one-on-one tutoring, small group teaching, co-teaching, whole class teaching).

Preclinical Field Experiences

The preclinical experience is conducted in local schools and provides an opportunity for teacher candidates to complete an in-depth field experience prior to student teaching. This field experience requires a substantial time commitment, as teacher candidates spend the entire day in schools during designated weeks. The Adolescent/Young Adult preclinical experience is scheduled during the fall semester. Applications for the preclinical experience must be submitted to the Office of Student Field Experience, one year in advance (by September 1).

• EDFN 3710 Educational Assessment

And

• SED 4800C Science Methods for Adolescent and Young Adult Learners

Student Teaching

Students complete a 16 week student teaching experience. Students must pass the edTPA performance-based assessment with a minimum score of 37 during this experience.

• SED 4842 Supervised Student Teaching: High School

And

• SED 4842A Student Teaching Seminar for Secondary Education

ADVISEMENT

Advise is provided by the academic advisors in the Beeghly College of Education. Majors in this program must complete general education requirements, subject area curriculum requirements, reading course

Learning Outcomes

The following learning outcomes are based on The Ohio Standards for the Teaching Profession. These standards were developed for use as a guide for teachers as they continually reflect upon and improve their effectiveness as educators throughout all of the stages of their careers. These standards serve as an important tool for teachers as they consider their growth and development in the profession. These standards in developing and content of each individual student.

Teachers understand student learning and development and respect the diversity of the students they teach.

Teachers know and understand the content area for which they have instructional responsibility.

Teachers understand and use varied assessments to inform instruction, evaluate and ensure student learning.

Teachers plan and deliver effective instruction that advances the learning of each individual student.

Teachers create learning environments that promote high levels of learning and achievement for all students.

Teachers assume responsibility for professional growth, performance and involvement as an individual and as a member of a learning community.

Teachers collaborate and communicate with students, parents, other educators, administrators and the community to support student learning. Teachers assume responsibility for professional growth, performance and involvement as an individual and as a member of a learning community.

Bachelor of Science in Education in Integrated Sciences (7-12) - Adolescent License, Chemistry Concentration

Dr. Katie Cripe, Program Coordinator
requirements, and professional education requirements. Prior to student teaching, all adolescent/young adult majors must complete a preclinical experience.

REQUIRED ASSESSMENTS

The Ohio Assessments for Educators (OAE) assesses the content area and professional (pedagogical) knowledge of candidates who are seeking an initial Ohio educator license or adding a new licence area. The assessments are aligned with Ohio’s New Learning Standards. Teacher candidates must pass these exams prior to student teaching.

003 Assessment of Professional Knowledge Adolescence to Young Adult (7-12) (All AYA Teacher Candidates)

024 Integrated Science (for teacher candidates with Science concentration)
SED 4842A  Student Teaching Seminar for Secondary Education  

Total Semester Hours: 146-149 s.h.

1  Prerequisites for preclinical curriculum.
2  Upper division course.

BCOE Notes:

Advisement:

- It is highly recommended that all teacher candidates meet with an academic advisor every semester.
- Freshmen, athletes, and students on warning and probation are required to meet with an advisor before registration.
- At the completion of 30 SH any teacher candidate who: 1) was required to and has not passed PRAXIS Core Exam(s), or 2) holds a GPA of 2.25 or below will be referred to Central Advising for advising and career services. If at a later date the teacher candidate passes all required parts of the Praxis Core Exam and attains a GPA of 2.25 or higher that student may return to BCOE for advising.

Important Notes:

- Neither admission to the University nor declaration of a major related to a teaching field guarantees admission to the BCOE's Teacher Education Programs or candidacy for a teaching license.
- Formal Admission to Teacher Education (Upper-Division) is required before teacher candidates are allowed to enroll in certain junior and senior level courses in BCOE.
- Undetermined education majors must declare a major before applying for admission to a Teacher Education Program.
- Admission to a Teacher Education Program is obtained upon satisfactory completion of the following requirements:
  - Minimum completion of 50 SH
  - Minimum 2.75 overall GPA
  - Meet one of the following criteria:
    - Overall GPA 3.4 or better, OR
    - ACT scores of Reading-21, English-18, Math-22, AND/OR
    - SAT scores of Reading-450, Writing-430, Math-520, AND/OR
  - Praxis CORE scores, Reading-156, Writing-150, Math-150 (Attach a copy of your CORE scores to the application)

(Attach a copy of your CORE scores to the application)

- "B" average or better (A-C, B-B) for:
  - ENGL 1550, ENGL 1551

If failure to meet "B" average above must also complete:

- ENGL 2601 grade of "B" or better. If you receive a "C" or below you will need to retake the course.

- "B" average or better (B-B-B, A-B-C) across the following:
  - EDFN 1501, CMST 1545
  - SPED 2630, GEOL 1505 or BIOL 2602 or CHEM 1516 or PHYS 2610

If student does not have a "B" average, student will be required to retake one or more of these courses until the "B" average is achieved.

- A grade of "C" or better is required in all required major courses. Courses taken as "CR/NC" will not count towards the major

- Professional education and block courses may only be repeated one time.
- Minimum requirements for teaching licenses are determined by the Ohio Department of Education; if those requirements change, they become effective immediately at Youngstown State University. (YSU Undergraduate Catalog).

Upper-Division Application Process

- Upper division application and forms must be printed from the BCOE website.
- After completing a minimum of 50 SH, submit the following:
  - Upper Division application
  - Good Moral Character Statement
  - copy of BCI & FBI clearances
  - schedule an upper division interview with the BCOE Office of Student Services, room 2101, no later than:
- Upper Division Application Deadline
  - September 1—to register for Upper Division Courses for Spring
  - February 1—to register for Upper Division courses for Summer & Fall
- Each completed application is reviewed and approved by the Upper Division Admission and Retention Committee. If all requirements are met, the teacher candidate may register for Upper Division courses for the following semester. Upper Division courses are the courses designated with the "*" symbol. Applications submitted after the deadline will not be processed until the end of the respective semester.

Program Notes:

- If Math concentration is chosen, Math GER is not required. If Science concentration is chosen, Natural Science GER is fulfilled through subject area curriculum. If Language Arts concentration is chosen, Arts & Humanities GER is fulfilled through subject area curriculum. If Social Studies concentration is chosen, Social Sciences GER is fulfilled through subject area curriculum.
- Candidates will not be permitted to take the following professional education courses more than twice: EDFN 1501, EDFN 3708, PSYC 3709, SPED 2630, TERG 2601, 3701, 3702, 3703, 2610, 3711, TEMC 4802, SED 4800, ECIS 2629; ECIS 3700, all preclinical experience courses, student teaching, and student teaching seminar.
- If the program is concerned regarding teacher candidate performance in the preclinical experience, as determined by CPAST criteria, the program coordinator may require the teacher candidate to complete an additional preclinical experience prior to the student teaching experience.

Preclinical Application with Request for Graduation Evaluation

- Preclinical application is completed on TaskStream. Directions are available on the BCOE website.
- Preclinical application and graduation evaluation request must be submitted one year prior to the intended preclinical semester no later than:
  - September 1—for Fall preclinical
  - February 1—for Spring preclinical
- Preclinical candidates are screened for eligibility based on GPA and course completion.

Student Teaching:

- Prerequisites:
  - BCOE Upper Division and Senior status,
  - Overall 2.75 GPA
  - Minimum of 2.67 GPA in subject area curriculum and professional education courses with no grade less than a "C" (each computed individually).
  - Passage of OAE test(s) and ACTFL tests for foreign language.

  Youngstown State University Undergraduate  135

  Youngstown State University Undergraduate  135
• Instructions for completing the Student Teaching Application and Forms are available on BCOE website. The application and forms must be completed and printed from the BCOE website and submitted to the BCOE Office of Student Services no later than:
  • September 1— to Student Teach the following Spring Semester
  • February 1— to Student Teach the following Fall Semester

Graduation Process:

• Apply for graduation during the first three weeks of the semester you plan to graduate. Graduation evaluation must be completed in advance of application for graduation.

Completing a Bachelor of Science in Education without Licensure:

• Teacher candidates who choose to graduate without licensure must apply for approval in the BCOE Office of Student Services.
• Once approved, teacher candidates graduating without licensure must take TCED 4830 (3 SH) capstone in place of student teaching.

Year 1

Fall

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<td>CHEM 1515 &amp; 1515L</td>
<td>General Chemistry 1 and General Chemistry 1 Laboratory</td>
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<td>BIOL 2601 &amp; 2601L</td>
<td>General Biology: Molecules and Cells and General Biology: Molecules and Cells Laboratory</td>
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<td>TCED 1500</td>
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Semester Hours 19-20

Spring

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<td>General Biology: Organisms and Ecology and General Biology: Organisms and Ecology Laboratory</td>
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Semester Hours 21

Year 2

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Semester Hours 19

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<td>PHYS 2611 &amp; 2611L</td>
<td>General Physics 2 and General Physics laboratory 2</td>
<td>5</td>
</tr>
<tr>
<td>ASTR 1504</td>
<td>Descriptive Astronomy</td>
<td>3</td>
</tr>
</tbody>
</table>

Semester Hours

Year 3

Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 2604 &amp; 2604L</td>
<td>Quantitative Analysis and Quantitative Analysis Laboratory</td>
<td>5</td>
</tr>
<tr>
<td>GEOL 2602</td>
<td>Introduction to Oceanography</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 2630</td>
<td>Weather</td>
<td>3</td>
</tr>
<tr>
<td>Social and Personal Awareness GER</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Physics Elective</td>
<td>3-4</td>
<td></td>
</tr>
</tbody>
</table>

Semester Hours 21

Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDFN 3708</td>
<td>Education and Society</td>
<td>3</td>
</tr>
<tr>
<td>SED 3706</td>
<td>Principles of Teaching Adolescents</td>
<td>3</td>
</tr>
<tr>
<td>TERG 3711</td>
<td>Reading Application in Content Areas, Secondary Years</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 2608</td>
<td>Sound</td>
<td>3</td>
</tr>
<tr>
<td>TECM 3707</td>
<td>Science/Technology/Society</td>
<td>3</td>
</tr>
<tr>
<td>Social Science GER</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Social and Personal Awareness Elective</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

Semester Hours 17-18

Year 4

Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDFN 3710</td>
<td>Educational Assessment</td>
<td>3</td>
</tr>
<tr>
<td>SED 4800C</td>
<td>Science Methods for Adolescent and Young Adult Learners</td>
<td>3</td>
</tr>
<tr>
<td>Arts and Humanities GER</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Chemistry Elective</td>
<td>3-5</td>
<td></td>
</tr>
<tr>
<td>Biology Elective</td>
<td>5</td>
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</table>

Semester Hours 17-19

Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>SED 4842</td>
<td>Supervised Student Teaching: High School</td>
<td>10</td>
</tr>
<tr>
<td>SED 4842A</td>
<td>Student Teaching Seminar for Secondary Education</td>
<td>2</td>
</tr>
</tbody>
</table>

Semester Hours 12

Total Semester Hours 147-151

Learning Outcomes

The following learning outcomes are based on The Ohio Standards for the Teaching Profession. These standards were developed for use as a guide for teachers as they continually reflect upon and improve their effectiveness as educators throughout all of the stages of their careers. These standards serve as an important tool for teachers as they consider their growth and development in the profession. These standards in developing and content of our teacher education programs. They are interrelated and connect in teachers’ practice.

• Teachers understand student learning and development and respect the diversity of the students they teach.
• Teachers know and understand the content area for which they have instructional responsibility.
• Teachers understand and use varied assessments to inform instruction, evaluate and ensure student learning.
• Teachers plan and deliver effective instruction that advances the learning of each individual student.
• Teachers create learning environments that promote high levels of learning and achievement for all students.
• Teachers assume responsibility for professional growth, performance and involvement as an individual and as a member of a learning community.
• Teachers collaborate and communicate with students, parents, other educators, administrators and the community to support student learning. Teachers assume responsibility for professional growth, performance and involvement as an individual and as a member of a learning community.

Bachelor Science in Education in Integrated Sciences (7-12) - Adolescent License, Earth/Space Science Concentration

Dr. Katie Cripe, Program Coordinator

OVERVIEW
In cooperation with various academic disciplines in the University, the Department of Teacher Education and Leadership Studies offers a four-year AYA Education Program (grades 7-12), Integrated Sciences/Earth-Space Concentration, approved by the Ohio Department of Education. The AYA Integrated Sciences License, Grades 7-12 (Earth/Space as the primary concentration), Bachelor of Science in Education degree requires a minimum of 147-150 semester hours of course work. The Integrated Science license qualifies the license holder to teach all areas of science (Biology, Chemistry, Earth/Space, and Physics). This teaching field also requires passage of the Ohio Assessments for Educators in order to be eligible to student teach.

EMPLEYMENT OPPORTUNITIES
Graduates of the Adolescent/Young Adult Program will be qualified to teach in the 7-12 classroom. Additional opportunities may be available in the private sector to tutor students. It is recommended that students in this major consider adding the Teaching English to Speakers of Other Languages (TESOL) endorsement to increase marketability.

Professional Dispositions:
In addition to the above learning outcomes, teacher candidates are expected to display the following professional dispositions:
• Creating fairness in the classroom
• Providing an inclusive environment that is safe and conducive to learning
• Demonstrating the belief that all students can learn
• Fostering collaborative relationships to support student learning and well-being
• Exhibiting professional skills

FIELD EXPERIENCES AND STUDENT TEACHING
Students complete over 120 hours of pre-clinical experiences in ad Field experiences are included in the following courses and offer opportunities to provide varying levels of classroom support (observing, one-on-one tutoring, small group teaching, co-teaching, whole class teaching).

Field Experiences
• EDFN 1501 Introduction to Education
• EDFN 3708 Education and Society
• SPED 2630 Individuals with Exceptionalities in Society
• TERG 3711 Reading Application in Content Areas, Secondary Years

Preclinical Field Experiences:
The preclinical experience is conducted in local schools and provides an opportunity for teacher candidates to complete an in-depth field experience prior to student teaching. This field experience requires a substantial time commitment, as teacher candidates spend the entire day in schools during designated weeks. The Adolescent/Young Adult preclinical experience is scheduled during the fall semester. Applications for the preclinical experience must be submitted (1) one year in advance to BCOE Room 2101, by September 1 for the preclinical experience. Contact the Beeghly College of Education, academic advisors for minimum preclinical prerequisites.

• EDFN 3710 Educational Assessment
• SED 3706 Principles of Teaching Adolescents

And

• SED 4800C Science Methods for Adolescent and Young Adult Learners
Or
• SED 4800E English Methods for Adolescent and Young Adult Learners
Or
• SED 4800M Mathematics Methods for Adolescent and Young Adult Learners
Or
• SED 4800S Social Studies Methods for Adolescent and Young Adult Learners

Student Teaching
Students complete a 16 week student teaching experience. Students must pass the edTPA performance-based assessment with a minimum score of 37 during this experience.

• SED 4842 Supervised Student Teaching: High School
• SED 4842A Student Teaching Seminar for Secondary Education

ADVISEMENT
Advisement is provided by the academic advisors in the Beeghly College of Education. Majors in this program must complete general education requirements, subject area curriculum requirements, reading course requirements, and professional education requirements. Prior to student teaching, all adolescent/young adult majors must complete a preclinical experience.

REQUIRED ASSESSMENTS
The Ohio Assessments for Educators (OAE) assess the content area and professional (pedagogical) knowledge of candidates who are seeking initial Ohio educator license or adding a new licence area. The assessments are aligned with Ohio’s New Learning Standards. Teacher candidates must pass these exams prior to student teaching.

003 Assessment of Professional Knowledge Adolescence to Young Adult (7-12) (All AYA Teacher Candidates)
020 English Language Arts (for teacher candidates with ELA concentration)
027 Mathematics (for teacher candidates with Math concentration)
024 Integrated Science (for teacher candidates with Science concentration)
025 Integrated Social Studies (for teacher candidates with Social Studies concentration)

ENDORSEMENTS
The following endorsements are available to individuals holding this teaching license and may increase marketability: K-12 TESOL Endorsement, K-12 Reading Endorsement.

• K-12 TESOL Endorsement
• K-12 Reading Endorsement
<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIRST YEAR REQUIREMENT - STUDENT SUCCESS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>YSU 1500</td>
<td>Success Seminar</td>
<td>1-2</td>
</tr>
<tr>
<td>or SS 1500</td>
<td>Strong Start Success Seminar</td>
<td></td>
</tr>
<tr>
<td>or HONR 1500</td>
<td>Intro to Honors</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>General Education Requirements</strong></td>
<td></td>
</tr>
<tr>
<td>ENGL 1550</td>
<td>Writing 1</td>
<td>3-4</td>
</tr>
<tr>
<td>or ENGL 1549</td>
<td>Writing 1 with Support</td>
<td></td>
</tr>
<tr>
<td>ENGL 1551</td>
<td>Writing 2</td>
<td>3</td>
</tr>
<tr>
<td>CMST 1545</td>
<td>Communication Foundations</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics Requirement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH 1571</td>
<td>Calculus 1</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Some courses are categorized in more than one knowledge domain. Courses can only be used once within the General Education model. Some majors prescribe specific GE courses. If a course has been added to the domains, it is required.</td>
<td></td>
</tr>
<tr>
<td>Arts and Humanities (6 s.h.)</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Natural Sciences (2 courses, 1 with lab) (6-7 s.h.)</td>
<td>This requirement met by courses in major</td>
<td></td>
</tr>
<tr>
<td>Social Science (6 s.h.)</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>PSYC 1560</td>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>Social Science elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Social and Personal Awareness (6 s.h.)</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td><strong>Subject Area Curriculum</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TCED 1500</td>
<td>Introduction to Becoming a Teacher First Year Experience Course BCOE</td>
<td></td>
</tr>
<tr>
<td>MATH 1572</td>
<td>Calculus 2</td>
<td>4</td>
</tr>
<tr>
<td>Earth/Space Science Concentration</td>
<td></td>
<td></td>
</tr>
<tr>
<td>All of the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEOL 1505</td>
<td>Physical Geology</td>
<td>4</td>
</tr>
<tr>
<td>&amp; 1505L</td>
<td>and Physical Geology Laboratory</td>
<td></td>
</tr>
<tr>
<td>GEOL 2605</td>
<td>Historical Geology</td>
<td>4</td>
</tr>
<tr>
<td>GEOL 2602</td>
<td>Introduction to Oceanography</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 2630</td>
<td>Weather</td>
<td>3</td>
</tr>
<tr>
<td>ASTR 1504</td>
<td>Descriptive Astronomy</td>
<td>3</td>
</tr>
<tr>
<td>ASTR 2609</td>
<td>Moon and Planets</td>
<td>3</td>
</tr>
<tr>
<td>One of the following E/SS electives:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEOL 3720</td>
<td>Field Investigations in Geology</td>
<td>1-4</td>
</tr>
<tr>
<td>GEOL 2615</td>
<td>Geology and the Environment</td>
<td>3</td>
</tr>
<tr>
<td>ENST 2600</td>
<td>Foundations of Environmental Studies</td>
<td>3</td>
</tr>
<tr>
<td>One of the following E/SS Electives:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEOG 3703</td>
<td>Human Impacts on the Environment</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 3730</td>
<td>Global Climates</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 3737</td>
<td>Soils and Land Use</td>
<td>3</td>
</tr>
<tr>
<td>If primary science concentration is Earth/Space Science, then take the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL 2601 &amp; 2601L</td>
<td>General Biology: Molecules and Cells and General Biology: Molecules and Cells Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 2602 &amp; 2602L</td>
<td>General Biology: Organisms and Ecology and General Biology: Organisms and Ecology Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 1515 &amp; 1515L</td>
<td>General Chemistry 1 and General Chemistry 1 Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 1516 &amp; 1516L</td>
<td>General Chemistry 2 and General Chemistry 2 Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 3719 &amp; 3719L</td>
<td>Organic Chemistry 1 and Organic Chemistry 1 Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 2608</td>
<td>Sound</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 2610</td>
<td>General Physics 1</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 2610L</td>
<td>General Physics Laboratory 1</td>
<td>1</td>
</tr>
<tr>
<td>PHYS 2611</td>
<td>General Physics</td>
<td>4</td>
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<tr>
<td>PHYS 2611L</td>
<td>General Physics laboratory 2</td>
<td>1</td>
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<tr>
<td>Select 5 s.h. from the following BIOL electives:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL 3741 &amp; 3741L</td>
<td>Animal Diversity and Animal Diversity Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 3702 &amp; 3702L</td>
<td>Microbiology and Microbiology Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 3721</td>
<td>Genetics</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 3762 &amp; 3762L</td>
<td>Field Botany and Field Botany Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 3759</td>
<td>Evolution</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 4890</td>
<td>Molecular Genetics</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 4890L</td>
<td>Molecular Genetics Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 3730</td>
<td>Human Physiology has</td>
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</tr>
<tr>
<td>BIOL 3730L</td>
<td>Human Physiology Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>Select one of the following CHEM electives:</td>
<td></td>
<td></td>
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<tr>
<td>CHEM 2604 &amp; 2604L</td>
<td>Quantitative Analysis and Quantitative Analysis Laboratory</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 3720 &amp; 3720L</td>
<td>Organic Chemistry 2 and Organic Chemistry 2 Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 3785</td>
<td>Biochemistry 1</td>
<td>3</td>
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<tr>
<td>Select a minimum of 3 s.h from the following PHYS electives:</td>
<td></td>
<td></td>
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<tr>
<td>PHYS 3703</td>
<td>Classical Mechanics and Dynamics</td>
<td>4</td>
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<tr>
<td>PHYS 3705</td>
<td>Thermodynamics and Classical Statistical Dynamics</td>
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</tr>
<tr>
<td>PHYS 3705L</td>
<td>Thermodynamics and Classical Statistical Mechanics Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>PHYS 3704</td>
<td>Modern Physics</td>
<td>4</td>
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<tr>
<td>PHYS 3704L</td>
<td>Modern Physics Laboratory</td>
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</tr>
<tr>
<td>PHYS 3722</td>
<td>Advanced Optics and Light</td>
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</tr>
<tr>
<td>PHYS 3722L</td>
<td>Advanced Optics Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>PHYS 4805</td>
<td>Undergraduate Physics Research</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 2607</td>
<td>Physical Science for Middle and Secondary Education</td>
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</tr>
<tr>
<td>Professional Education Curriculum</td>
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</tr>
<tr>
<td>EDFN 1501</td>
<td>Introduction to Education</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 3709</td>
<td>Psychology of Education</td>
<td>3</td>
</tr>
<tr>
<td>SPED 2630</td>
<td>Individuals with Exceptionalities in Society ¹</td>
<td>3</td>
</tr>
<tr>
<td>SED 3706</td>
<td>Principles of Teaching Adolescents ²</td>
<td>3</td>
</tr>
<tr>
<td>EDFN 3708</td>
<td>Education and Society</td>
<td>3</td>
</tr>
<tr>
<td>TERG 3711</td>
<td>Reading Application in Content Areas, Secondary Years ²</td>
<td>3</td>
</tr>
<tr>
<td>TEMC 3707</td>
<td>Science/Technology/Society ¹</td>
<td>3</td>
</tr>
<tr>
<td>Preclinical Curriculum</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EDFN 3710</td>
<td>Educational Assessment</td>
<td>3</td>
</tr>
<tr>
<td>SED 4800C</td>
<td>Science Methods for Adolescent and Young Adult Learners ³</td>
<td>3</td>
</tr>
<tr>
<td>Student Teaching Curriculum</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SED 4842</td>
<td>Supervised Student Teaching: High School ²</td>
<td>2</td>
</tr>
<tr>
<td>SED 4842A</td>
<td>Student Teaching Seminar for Secondary Education ²</td>
<td>2</td>
</tr>
<tr>
<td>Total Semester Hours for the Degree: 147-150 s.h.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>¹ Prerequisites for preclinical curriculum.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>² Upper division course.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>BCOE Notes:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advisement:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• It is highly recommended that all teacher candidates meet with an academic advisor every semester.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
• Freshmen, athletes, and students on warning and probation are required to meet with an advisor before registration.

• At the completion of 30 SH any teacher candidate who: 1) was required to and has not passed PRAXIS Core Exam(s), or 2) holds a GPA of 2.25 or below will be referred to Central Advising for advising and career services. If at a later date the teacher candidate passes all required parts of the Praxis Core Exam and attains a GPA of 2.25 or higher that student may return to BCOE for advising.

Important Notes:

• Neither admission to the University nor declaration of a major related to a teaching field guarantees admission to the BCOE’s Teacher Education Programs or candidacy for a teaching license.

• Formal Admission to Teacher Education (Upper-Division) is required before teacher candidates are allowed to enroll in certain junior and senior level courses in BCOE.

• Undetermined education majors must declare a major before applying for admission to a Teacher Education Program.

• Admission to a Teacher Education Program is obtained upon satisfactory completion of the following requirements:
  - Minimum completion of 50 SH
  - Minimum 2.75 overall GPA
  - Meet one of the following criteria:
    - Overall GPA 3.4 or better, OR
    - ACT scores of Reading-21, English-18, Math-22, AND/OR
    - SAT scores of Reading-450, Writing-430, Math-520, AND/OR
    - Praxis Core scores, Reading-156, Writing-162, Math-150

(Attach a copy of your CORE scores to the application)

• “B” average or better (A-C, B-B) for:
  - ENGL 1500—ENGL 1551

If failure to meet “B” average above must also complete:

• ENGL 2601 grade of “B” or better. If you receive a “C” or below you will need to retake the course.

• “B” average or better (B-B-B, A-B-C) across the following:
  - EDFN 1501—CMST 1545
  - SPED 2630—GEOL 1505 or BIOL 2602 or CHEM 1516 or PHYS 2610

If student does not have a “B” average, student will be required to retake one or more of these courses until the “B” average is achieved.

• A grade of “C” or better is required in all required major courses. Courses taken as “CR/NC” will not count towards the major.

• Professional education and block courses may only be repeated one time.

• Minimum requirements for teaching licenses are determined by the Ohio Department of Education; if those requirements change, they become effective immediately at Youngstown State University. (YSU Undergraduate Catalog).

Upper-Division Application Process

• Upper division application and forms must be printed from the BCOE website.

• After completing a minimum of 50 SH, submit the following:
  - Upper Division application
  - Good Moral Character Statement
  - copy of BCI & FBI clearances
  - schedule an upper division interview with the BCOE Office of Student Services, room 2101, no later than:
    - Upper Division Application Deadline
    - September 1—to register for Upper Division Courses for Spring
    - February 1—to register for Upper Division courses for Summer & Fall
  - Each completed application is reviewed and approved by the Upper Division Admission and Retention Committee. If all requirements are met, the teacher candidate may register for Upper Division courses for the following semester. Upper Division courses are the courses designated with the “*” symbol. Applications submitted after the deadline will not be processed until the end of the respective semester.

Program Notes:

• If Math concentration is chosen, Math GER is not required. If Science concentration is chosen, Natural Science GER is fulfilled through subject area curriculum. If Language Arts concentration is chosen, Arts & Humanities GER is fulfilled through subject area curriculum. If Social Studies concentration is chosen, Social Sciences GER is fulfilled through subject area curriculum.

• Candidates will not be permitted to take the following professional education courses more than twice: EDFN 1501, EDFN 3708, PSYC 3709, SPED 2630, TERG 2601, 3701, 3702, 3703, 2610, 3711, TEMC 4802, SED 4800, ECIS 2629, ECIS 3700, all preclinical experience courses, student teaching, and student teaching seminar.

• If the program is concerned regarding teacher candidate performance in the preclinical experience, as determined by CPAST criteria, the program coordinator may require the teacher candidate to complete an additional preclinical experience prior to the student teaching experience.

Preclinical Application with Request for Graduation Evaluation

• Preclinical application is completed on TaskStream. Directions are available on the BCOE website.

• Preclinical application and graduation evaluation request must be submitted one year prior to the intended preclinical semester no later than:
  - September 1—for Fall preclinical
  - February 1—for Spring preclinical

• Preclinical candidates are screened for eligibility based on GPA and course completion.

Student Teaching:

• Prerequisites:
  - BCOE Upper Division and Senior status,
  - Overall 2.75 GPA
  - Minimum of 2.67 GPA in subject area curriculum and professional education courses with no grade less than a “C” (each computed individually),
  - Passage of OAE test(s) and ACTFL tests for foreign language.

• Instructions for completing the Student Teaching Application and Forms are available on BCOE website. The application and forms must be completed and printed from the BCOE website and submitted to the BCOE Office of Student Services no later than:
  - September 1—to Student Teach the following Spring Semester
  - February 1—to Student Teach the following Fall Semester

Graduation Process:
Completing a Bachelor of Science in Education without Licensure:

- Teacher candidates who choose to graduate without licensure must apply for approval in the BCOE Office of Student Services.
- Once approved, teacher candidates graduating without licensure must take TCED 4830 (3 SH) capstone in place of student teaching.

Adapted from The Ohio Standards for the Teaching Profession. These standards were developed for use as a guide for teachers as they continually reflect upon and improve their effectiveness as educators throughout all of the stages of their careers. These standards serve as an important tool for teachers as they consider their growth and development in the profession. These standards in developing and content standards serve as an important tool for teachers as they consider their growth and development throughout all of the stages of their careers. These standards for teachers as they continually reflect upon and improve their effectiveness as educators throughout all of the stages of their careers. These standards serve as an important tool for teachers as they consider their growth and development in the profession. These standards in developing and content of our teacher education programs. They are interrelated and connect in teachers’ practice.

Learning Outcomes

The following learning outcomes are based on The Ohio Standards for the Teaching Profession. These standards were developed for use as a guide for teachers as they continually reflect upon and improve their effectiveness as educators throughout all of the stages of their careers. These standards serve as an important tool for teachers as they consider their growth and development in the profession. These standards in developing and content of our teacher education programs. They are interrelated and connect in teachers’ practice.

- Teachers understand student learning and development and respect the diversity of the students they teach.
- Teachers know and understand the content area for which they have instructional responsibility.
- Teachers understand and use varied assessments to inform instruction, evaluate and ensure student learning.
- Teachers plan and deliver effective instruction that advances the learning of each individual student.
- Teachers create learning environments that promote high levels of learning and achievement for all students.
- Teachers assume responsibility for professional growth, performance and involvement as an individual and as a member of a learning community.
- Teachers collaborate and communicate with students, parents, other educators, administrators and the community to support student learning. Teachers assume responsibility for professional growth, performance and involvement as an individual and as a member of a learning community.
Bachelor of Science in Education in Integrated Sciences (7-12) - Adolescent License, Physics Concentration

Dr. Katie Cripe, Program Coordinator

OVERVIEW
In cooperation with various academic disciplines in the University, the Department of Teacher Education and Leadership Studies offers a four-year AYA Education Program (grades 7-12), Integrated Sciences/Physics Concentration, approved by the Ohio Department of Education. The AYA Integrated Sciences License, Grades 7-12 (Physics as the primary concentration), Bachelor of Science in Education degree requires a minimum of 144-147 semester hours of course work. The Integrated Science license qualifies the license holder to teach all areas of science (Biology, Chemistry, Earth/Space, and Physics). This teaching field requires passage of the Ohio Assessments for Educators in order to be eligible to student teach.

EMPLOYMENT OPPORTUNITIES
Graduates of the Adolescent/Young Adult Program will be qualified to teach in the 7-12 classroom. Additional opportunities may be available in the private sector to tutor students.

Professional Dispositions:
In addition to the above learning outcomes, teacher candidates are expected to display the following professional dispositions:

• Creating fairness in the classroom
• Providing an inclusive environment that is safe and conducive to learning
• Demonstrating the belief that all students can learn
• Fostering collaborative relationships to support student learning and well-being

FIELD EXPERIENCES AND STUDENT TEACHING
Students complete a number of field experiences to support the learning of content and best practices of teaching. Field experiences offer opportunities to provide varying levels of classroom support (observing, one-on-one tutoring, small group teaching, co-teaching, whole class teaching).

Preclinical Field Experiences

The preclinical experience is conducted in local schools and provides an opportunity for teacher candidates to complete an in-depth field experience prior to student teaching. This field experience requires a substantial time commitment, as teacher candidates spend the entire day in schools during designated weeks. The Adolescent/Young Adult preclinical experience is scheduled during the fall semester. Applications for the preclinical experience must be submitted to the Office of Student Field Experience, one year in advance (September 1).

• EDFN 3710 Educational Assessment
And
• SED 4800C Science Methods for Adolescent and Young Adult Learners

Student Teaching

Students complete a 16 week student teaching experience. Students must pass the edTPA performance-based assessment with a minimum score of 37 during this experience.

• SED 4842 Supervised Student Teaching: High School
And
• SED 4842A Student Teaching Seminar for Secondary Education

ADVICEMENT
Advisement is provided by the academic advisors in the Beeghly College of Education. Majors in this program must complete general education requirements, subject area curriculum requirements, reading course requirements, and professional education requirements. Prior to student teaching, all adolescent/young adult majors must complete a preclinical experience.

REQUIRED ASSESSMENTS
The Ohio Assessments for Educators (OAE) assesses the content area and professional (pedagogical) knowledge of candidates who are seeking initial Ohio educator license or adding a new licence area. The assessments are aligned with Ohio’s New Learning Standards. Teacher candidates must pass these exams prior to student teaching.

003 Assessment of Professional Knowledge Adolescence to Young Adult (7-12) (All AYA Teacher Candidates)
024 Integrated Science (for teacher candidates with Science concentration)

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<td>MATH 1571</td>
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Some courses are categorized in more than one knowledge domain. Courses can only be used once within the General Education model. Some majors prescribe specific GE courses. If a course has been added to the domains, it is required.

Arts and Humanities (6 s.h.)
Natural Sciences (2 courses, 1 with lab) (7 s.h.)
Social Science (6 s.h.)
PSYC 1560 | General Psychology | 3 |
Social Science elective | 3 |
Social and Personal Awareness (6 s.h.) | 6 |

Subject Area Curriculum

TCED 1500 | Introduction to Becoming a Teacher First Year Experience Course BCOE | 3 |
MATH 1572 | Calculus 2 | 4 |

Physics Concentration
All of the following:

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**Total Semester Hours: 144-147 s.h.**

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**Preclinical Curriculum**

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<td>SED 3705</td>
<td>Principles of Teaching Adolescents</td>
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<td>EDFN 3708</td>
<td>Education and Society</td>
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<td>TERG 3711</td>
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**BCOE Notes:**

- It is highly recommended that all teacher candidates meet with an academic advisor every semester.
- Freshmen, athletes, and students on warning and probation are required to meet with an advisor before registration.
- At the completion of 30 SH any teacher candidate who: 1) was required to and has not passed PRAXIS Core Exam(s), or 2) holds a GPA of 2.25 or below will be referred to Central Advising for advising and career services.
- If at a later date the teacher candidate passes all required parts of the Praxis Core Exam and attains a GPA of 2.25 or higher that student may return to BCOE for advising.

**Important Notes:**

- Neither admission to the University nor declaration of a major related to a teaching field guarantees admission to the BCOE’s Teacher Education Programs or candidacy for a teaching license.
- Formal Admission to Teacher Education (Upper-Division) is required before teacher candidates are allowed to enroll in certain junior and senior level courses in BCOE.
- Undetermined education majors must declare a major before applying for admission to a Teacher Education Program.
- Admission to a Teacher Education Program is obtained upon satisfactory completion of the following requirements:
  - Minimum completion of 50 SH
  - Minimum 2.75 overall GPA
  - Meet one of the following criteria:
    - Overall GPA 3.4 or better, OR
    - ACT scores of Reading-21, English-18, Math-22, AND/OR
    - SAT scores of Reading-450, Writing-430, Math-520, AND/OR
    - Praxis CORE scores, Reading-156, Writing-162, Math-150

(Attach a copy of your CORE scores to the application)

- “B” average or better (A-C, B-B) for:
  - ENGL 1550, ENGL 1551

If failure to meet “B” average above must also complete:

- ENGL 2601 grade of “B” or better. If you receive a “C” or below you will need to retake the course.
- “B” average or better (B-B-B, A-B-C) across the following:
  - EDFN 1501, CMST 1545
  - SPED 2630, GEOL 1505 or BIOL 2602 or CHEM 1516 or PHYS 2610

If student does not have a “B” average, student will be required to retake one or more of these courses until the “B” average is achieved.
• A grade of “C” or better is required in all required major courses. Courses taken as "CR/NC" will not count towards the major.
• Professional education and block courses may only be repeated one time.
• Minimum requirements for teaching licenses are determined by the Ohio Department of Education; if those requirements change, they become effective immediately at Youngstown State University (YSU Undergraduate Catalog).

Upper-Division Application Process

• Upper division application and forms must be printed from the BCOE website.

• After completing a minimum of 50 SH, submit the following:
  • Upper Division application
  • Good Moral Character Statement
  • copy of BCI & FBI clearances
  • schedule an upper division interview with the BCOE Office of Student Services, room 2101, no later than:

• Upper Division Application Deadline
  • September 1—to register for Upper Division Courses for Spring
  • February 1—to register for Upper Division courses for Summer & Fall

Each completed application is reviewed and approved by the Upper Division Admission and Retention Committee. If all requirements are met, the teacher candidate may register for Upper Division courses for the following semester. Upper Division courses are the courses designated with the *+* symbol. Applications submitted after the deadline will not be processed until the end of the respective semester.

Program Notes:

• If Math concentration is chosen, Math GER is not required. If Science concentration is chosen, Natural Science GER is fulfilled through subject area curriculum. If Language Arts concentration is chosen, Arts & Humanities GER is fulfilled through subject area curriculum. If Social Studies concentration is chosen, Social Sciences GER is fulfilled through subject area curriculum.

• Candidates will not be permitted to take the following professional education courses more than twice: EDFN 1501, EDFN 3708, PSYC 3709, SPED 2630, TERG 2601, 3702, 3703, 2610, 3711, TEMC 4802, SED 3711, TCED 1500, MATH 1572, ENGL 1550, 1551, PSYC 1560, CMST 1545, EDFN 1501, MATH 1571, CHEM 1515, 1516, or ENGL 1549.

• If the program is concerned regarding teacher candidate performance in the preclinical experience, as determined by CPAST criteria, the program coordinator may require the teacher candidate to complete an additional preclinical experience prior to the student teaching experience.

Preclinical Application with Request for Graduation Evaluation

• Preclinical application is completed on TaskStream. Directions are available on the BCOE website.

• Preclinical application and graduation evaluation request must be submitted one year prior to the intended preclinical semester no later than:
  • September 1—for Fall preclinical
  • February 1—for Spring preclinical

Preclinical candidates are screened for eligibility based on GPA and course completion.

Student Teaching:

• Prerequisites:
  • BCOE Upper Division and Senior status,
  • Overall 2.75 GPA

• Minimum of 2.67 GPA in subject area curriculum and professional education courses with no grade less than a “C” (each computed individually).
• Passage of OAE test(s) and ACTFL tests for foreign language.
• Instructions for completing the Student Teaching Application and Forms are available on BCOE website. The application and forms must be completed and printed from the BCOE website and submitted to the BCOE Office of Student Services no later than:
  • September 1—to Student Teach the following Fall Semester
  • February 1—to Student Teach the following Fall Semester

Graduation Process:

• Apply for graduation during the first three weeks of the semester you plan to graduate. Graduation evaluation must be completed in advance of application for graduation.

Completing a Bachelor of Science in Education without Licensure:

• Teacher candidates who choose to graduate without licensure must apply for approval in the BCOE Office of Student Services.
• Once approved, teacher candidates graduating without licensure must take TCED 4830 (3 SH) capstone in place of student teaching.

### Year 1

#### Fall

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<td>or ENGL 1549</td>
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<td>General Chemistry Laboratory</td>
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<td>General Biology: Molecules and Cells</td>
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<td>CHEM 1516 &amp; 1516L</td>
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<td>4</td>
<td>Fall</td>
<td>EDFN 3710</td>
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<td>SED 4800C</td>
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<td>Arts and Humanities GER</td>
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<td>Chemistry Elective</td>
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<td>Physics Elective</td>
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<td>Spring</td>
<td>SED 3706</td>
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<td>EDFN 3708</td>
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<td>TERG 3711</td>
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<td>TEMC 3707</td>
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<td></td>
<td>PHYS 2608</td>
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<td>Social Science GER</td>
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<td></td>
<td>Social and Personal Awareness GER</td>
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<td>SED 4842</td>
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</tbody>
</table>
Bachelor of Science in Education in Integrated Social Studies (7-12) - Adolescent License

- Dr. Katie Cripe, Program Coordinator

OVERVIEW

- In cooperation with various academic disciplines in the University, the Department of Teacher Education offers a four-year AYA Education Program (grades 7-12), Integrated Social Studies, approved by the Ohio Department of Education. The AYA Integrated Social Studies License, Grades 7-12, Bachelor of Science in Education degree requires a minimum of 122 semester hours of course work. This teaching field also requires passage of the Ohio Assessments for Educators in order to be eligible to student teach.

EMPLOYMENT OPPORTUNITIES

- Graduates of the Adolescent/Young Adult Program will be qualified to teach in the 7-12 classroom. Additional opportunities may be available in the private sector to tutor students. It is recommended that students in this major consider adding the Teaching English to Speakers of Other Languages (TESOL) endorsement to increase marketability. Graduates wanting to teach College Credit Plus courses should consider a Master of Science in Education Content Area Concentration degree.
- Professional Dispositions:
  - In addition to the above learning outcomes, teacher candidates are expected to display the following professional dispositions:
  - Creating fairness in the classroom
  - Providing an inclusive environment that is safe and conducive to learning
  - Demonstrating the belief that all students can learn
  - Fostering collaborative relationships to support student learning and well-being
  - Exhibiting professional skills

FIELD EXPERIENCES AND STUDENT TEACHING

- Students complete over 120 hours of pre-clinical experiences. Field experiences are included in the following courses and offer opportunities to provide varying levels of classroom support (observing, one-on-one tutoring, small group teaching, co-teaching, whole class teaching).
- Field Experiences
  - EDFN 1501 Introduction to Education
  - EDFN 3708 Education and Society
  - SPED 2630 Individuals with Exceptionalities in Society
  - TERG 3711 Reading Application in Content Areas, Secondary Years
  - SED 3706 Principles of Teaching Adolescents

Preclinical Field Experiences

- The preclinical experience is conducted in local schools and provides an opportunity for teacher candidates to complete an in-depth field experience prior to student teaching. This field experience requires a substantial time commitment, as teacher candidates spend the entire day in schools during designated weeks. The Adolescent/Young Adult preclinical experience is scheduled during the fall semester. Applications for the preclinical experience must be submitted onto TaskStream (1) one year in advance, by September 1 for the preclinical experience.

Contact the Beeghly College of Education, academic advisors for minimum preclinical prerequisites.
  - EDFN 3710 Educational Assessment
  - SED 4800S Social Studies Methods for Adolescent and Young Adult Learners

Student Teaching

Students complete a 16 week student teaching experience. Students must pass the edTPA performance-based assessment with a minimum score of 37 during this experience.
  - SED 4842 Supervised Student Teaching: High School
  - SED 4842A Student Teaching Seminar for Secondary Education

ENDORSMENTS

- Advisement is provided by the academic advisors in the Beeghly College of Education. Majors in this program must complete general education requirements, subject area curriculum requirements, reading course requirements, and professional education requirements. Prior to student teaching, all adolescent/young adult majors must complete a preclinical experience.

REQUIRED ASSESSMENTS

The Ohio Assessments for Educators (OAE) assess the content area and professional (pedagogical) knowledge of candidates who are seeking initial Ohio educator license or adding a new licence area. The assessments are aligned with Ohio’s New Learning Standards. Teacher candidates must pass these exams prior to student teaching.

003 Assessment of Professional Knowledge Adolescence to Young Adult (7-12) (All AYA Teacher Candidates)

025 Integrated Social Studies (for teacher candidates with Social Studies concentration)

ENDORSEMENTS

The following endorsements are available to individuals holding this teaching license and may increase marketability: K-12 TESOL Endorsement, K-12 Reading Endorsement.

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 1550</td>
<td>Writing 1</td>
<td>3-4</td>
</tr>
<tr>
<td>ENGL 1551</td>
<td>Writing 2</td>
<td>3</td>
</tr>
<tr>
<td>CMST 1545</td>
<td>Communication Foundations</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics Requirement</td>
<td>One of the following courses may be taken to fulfill the Mathematics Requirement</td>
<td>3</td>
</tr>
<tr>
<td>MATH 2652</td>
<td>Preferred math course if you are required to take Math Praxis Core</td>
<td>3</td>
</tr>
<tr>
<td>MATH 2623</td>
<td>Quantitative Reasoning</td>
<td></td>
</tr>
<tr>
<td>Arts and Humanities (6 s.h.)</td>
<td>MATH 265/MATHEMATICS FOR EARLY CHILDHOOD TEACHERS 2</td>
<td>6</td>
</tr>
<tr>
<td>Natural Sciences (2 courses, 1 with lab) (7 s.h.)</td>
<td>GEOG 2630L</td>
<td>Weather Lab</td>
</tr>
<tr>
<td>The remaining 3s.h. are met with courses in the major. Social Science (6 s.h.)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Advisement:

- It is highly recommended that all teacher candidates meet with an academic advisor every semester.
- Freshmen, athletes, and students on warning and probation are required to meet with an advisor before registration.
- At the completion of 30 SH any teacher candidate who: 1) was required to and has not passed PRAXIS Core Exam(s), or 2) holds a GPA of 2.25 or below will be referred to Central Advising for advising and career services. If at a later date the teacher candidate passes all required parts of the Praxis Core Exam and attains a GPA of 2.25 or higher that student may return to BCOE for advising.

Important Notes:

- Neither admission to the University nor declaration of a major related to a teaching field guarantees admission to the BCOE's Teacher Education Programs or candidacy for a teaching license.
- Formal Admission to Teacher Education (Upper-Division) is required before teacher candidates are allowed to enroll in certain junior and senior level courses in BCOE.
- Undetermined education majors must declare a major before applying for admission to a Teacher Education Program.
- Admission to a Teacher Education Program is obtained upon satisfactory completion of the following requirements:
  
  _____ Minimum completion of 50 SH
  _____ Minimum 2.75 overall GPA
  ___ Meet one of the following criteria:
  _____ Overall GPA 3.4 or better; OR
  _____ ACT scores of Reading-21, English-18, Math-22, AND/OR
  _____ SAT scores of Reading-450, Writing-430, Math-520, AND/OR
  _____ Praxis CORE scores, Reading-156, Writing-162, Math-150

  (Attach a copy of your CORE scores to the application)

  • “B” average or better (A-C, B-B) for:
  _____ ENGL 1550, ENGL 1551

  If failure to meet “B” average above must also complete:

  _____ ENGL 2601 grade of “B” or better.

If you receive a “C” or below you will

  ___ retake one or more of these courses until the “B” average is achieved.

  • A grade of “C” or better is required in all required major courses. Courses taken as "CR/NC" will not count towards the major
  • Professional education and block courses may only be repeated one time.
  • Minimum requirements for teaching licenses are determined by the Ohio Department of Education; if those requirements change, they become effective immediately at Youngstown State University. (YSU Undergraduate Catalog).

Upper-Division Application Process

- Upper division application and forms must be printed from the BCOE website.
- After completing a minimum of 50 SH, submit the following:
  • Upper Division application
  • Good Moral Character Statement
  • copy of BCI & FBI clearances
  • schedule an upper division interview with the BCOE Office of Student Services, room 2101, no later than:
  • Upper Division Application Deadline
Graduation Process:

- **September 1**—to register for Upper Division Courses for Spring
- **February 1**—to register for Upper Division courses for Summer & Fall

Each completed application is reviewed and approved by the Upper Division Admission and Retention Committee. If all requirements are met, the teacher candidate may register for Upper Division courses for the following semester. Upper Division courses are the courses designated with the “+” symbol. Applications submitted after the deadline will not be processed until the end of the respective semester.

Program Notes:

- If Math concentration is chosen, Math GER is not required. If Science concentration is chosen, Natural Science GER is fulfilled through subject area curriculum. If Language Arts concentration is chosen, Arts & Humanities GER is fulfilled through subject area curriculum. If Social Studies concentration is chosen, Social Sciences GER is fulfilled through subject area curriculum.
- Candidates will not be permitted to take the following professional education courses more than twice: EDFN 1501, EDFN 3708, PSYC 3709, SPED 2630, TERG 2601, 3701, 3702, 3703, 2610, 3711, TEMC 4802, SED 4800, ECIS 2629, ECIS 3700, all preclinical experience courses, student teaching, and student teaching seminar.
- If the program is concerned regarding teacher candidate performance in the preclinical experience, as determined by CPAST criteria, the program coordinator may require the teacher candidate to complete an additional preclinical experience prior to the student teaching experience.

Preclinical Application with Request for Graduation Evaluation

- Preclinical application is completed on TaskStream. Directions are available on the BCOE website.
- Preclinical application and graduation evaluation request must be submitted one year prior to the intended preclinical semester no later than:
  - **September 1**—for Fall preclinical
  - **February 1**—for Spring preclinical
- Preclinical candidates are screened for eligibility based on GPA and course completion.

Student Teaching:

- Prerequisites:
  - BCOE Upper Division and Senior status,
  - Overall 2.75 GPA
  - Minimum of 2.67 GPA in subject area curriculum and professional education courses with no grade less than a "C" (each computed individually),
  - Passage of OAE test(s) and ACTFL tests for foreign language.
- Instructions for completing the Student Teaching Application and Forms are available on BCOE website. The application and forms must be completed and printed from the BCOE website and submitted to the BCOE Office of Student Services no later than:
  - **September 1**—to Student Teach the following Fall Semester
  - **February 1**—to Student Teach the following Fall Semester

Graduation Process:

- Apply for graduation during the first three weeks of the semester you plan to graduate. Graduation evaluation must be completed in advance of application for graduation.

Completing a Bachelor of Science in Education without Licensure:

- Teacher candidates who choose to graduate without licensure must apply for approval in the BCOE Office of Student Services.
- Once approved, teacher candidates graduating without licensure must take TCED 4830 (3 SH) capstone in place of student teaching.

### Year 1

**Fall**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>YSU 1500</td>
<td>Success Seminar</td>
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<tr>
<td>ENGL 1550</td>
<td>Writing 1</td>
<td>3-4</td>
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<tr>
<td>or ENGL 1549</td>
<td>or Writing 1 with Support</td>
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<tr>
<td>MATH 2623</td>
<td>Quantitative Reasoning</td>
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<tr>
<td>POL 1560</td>
<td>American Government (counts as Social</td>
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<td></td>
<td>Science Elective)</td>
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<tr>
<td>EDFN 1501</td>
<td>Introduction to Education</td>
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<tr>
<td>TCED 1500</td>
<td>Introduction to Becoming a Teacher</td>
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<td></td>
<td>First Year Experience Course BCOE</td>
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<tr>
<td>CMST 1545</td>
<td>Communication Foundations</td>
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**Spring**

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<tr>
<td>ENGL 1551</td>
<td>Writing 2</td>
<td>3</td>
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<tr>
<td>SPED 2630</td>
<td>Individuals with Exceptionalities in</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Society</td>
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<tr>
<td>PSYC 1560</td>
<td>General Psychology</td>
<td>3</td>
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<tr>
<td>HIST 1511</td>
<td>World Civilization to 1500</td>
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<tr>
<td>ANTH 1500</td>
<td>Introduction to Anthropology</td>
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### Semester Hours: 19-20

### Year 2

**Fall**

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<tr>
<td>POL 2640</td>
<td>Contemporary World Governments</td>
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<tr>
<td>HIST 1512</td>
<td>World Civilization from 1500</td>
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<tr>
<td>ECON 2610</td>
<td>Principles 1: Microeconomics</td>
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<tr>
<td>HIST 2605</td>
<td>Turning Points in United States History</td>
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<td>GEOG 2640</td>
<td>Human Geography</td>
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**Spring**

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<tr>
<td>HIST 2606</td>
<td>Turning Points in United States History</td>
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<tr>
<td>PSYC 3709</td>
<td>Psychology of Education</td>
<td>3</td>
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<tr>
<td>ECON 2631</td>
<td>Introductory Macroeconomics for Education Majors</td>
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<tr>
<td>HIST 3764</td>
<td>Modern Europe, 1715 to the Present</td>
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<td>HIST 3703</td>
<td>Nineteenth Century America</td>
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### Semester Hours: 15

### Year 3

**Fall**

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<td>HIST 3712</td>
<td>United States in Crisis: 1900-1945</td>
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<tr>
<td>GEOG 3717</td>
<td>Geography of Europe</td>
<td>3</td>
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<tr>
<td>HIST 3702</td>
<td>Early America</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 1503</td>
<td>Physical Geography</td>
<td>3</td>
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<tr>
<td>SOC 1500</td>
<td>Introduction to Sociology</td>
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<tr>
<td>HIST 3748</td>
<td>History of Ohio</td>
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**Spring**

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<tbody>
<tr>
<td>Arts and Humanities GER</td>
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<tr>
<td>SED 3706</td>
<td>Principles of Teaching Adolescents</td>
<td>3</td>
</tr>
<tr>
<td>TERG 3711</td>
<td>Reading Application in Content Areas,</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Secondary Years</td>
<td></td>
</tr>
<tr>
<td>HIST 3795</td>
<td>The World since 1945</td>
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<tr>
<td>GEOG 2630</td>
<td>Weather</td>
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<tr>
<td>GEOG 2630L</td>
<td>Weather Lab</td>
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### Semester Hours: 18

### Year 4

**Fall**

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<tbody>
<tr>
<td>EDFN 3708</td>
<td>Education and Society</td>
<td>3</td>
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</table>

### Semester Hours: 16
Bachelor of Science in Education in Primary/Primary Intervention Specialist Education (P-5)

Dr. Crystal Ratican, Program Coordinator
Beeghly Hall 2422
(330) 941-3245
cratican@ysu.edu

Overview
The Department of Teacher Education offers a four-year Primary/Primary Intervention Specialist Program approved by the Ohio Department of Higher Education. The Primary/Primary Intervention Specialist (P-5) Bachelor of Science in Education degree requires a minimum of 123 semester hours of course work. This program requires the passage of multiple Ohio Assessment for Educator exams to become eligible to student teach. Contact the Department of Teacher Education and Leadership Studies or the Advisement Office for additional information.

Learning Outcomes
The following learning outcomes are based on The Ohio Standards for the Teaching Profession. These standards were developed for use as a guide for teachers as they continually reflect upon and improve their effectiveness as educators throughout all of the stages of their careers. These standards serve as an important tool for teachers as they consider their growth and development in the profession. These standards in developing and content of our teacher education programs. They are interrelated and connect in teachers’ practice.

- Teachers understand student learning and development and respect the diversity of the students they teach.
- Teachers know and understand the content area for which they have instructional responsibility.
- Teachers understand and use varied assessments to inform instruction, evaluate and ensure student learning.
- Teachers plan and deliver effective instruction that advances the learning of each individual student.
- Teachers create learning environments that promote high levels of learning and achievement for all students.
- Teachers assume responsibility for professional growth, performance and involvement as an individual and as a member of a learning community.
- Teachers collaborate and communicate with students, parents, other educators, administrators and the community to support student learning. Teachers assume responsibility for professional growth, performance and involvement as an individual and as a member of a learning community.

Employment Opportunities
Graduates of the new Primary/Primary IS dual license will be able to work in the following areas: in schools as the classroom teacher of record, inclusion classroom teacher of record, or P-5 special education classroom of record. Graduates will also be trained to work with children who are currently learning the English language. Other employment opportunities include: working with regional Educational Service Providers, providing individual services to children within their homes, working with regionally based programs, medical providers, or private education companies.

Field Experiences and Student Teaching
Students complete over 300 hours of pre-clinical experiences in addition to student teaching. Field experiences are included in the following courses and offer opportunities to provide varying levels of classroom support (observing, one-on-one tutoring, small group teaching, co-teaching, whole class teaching).

Field Experiences
- EDFN 1501 Introduction to Education
- EDFN 3708 Education and Society
- ELIS 2601 Development, Learning and the Arts
- ELIS 3700 Building Pro-Social Learning Environments P-5
- HEPE 2624 Physical Education for Children in Early Childhood Settings
- SPED 2630 Individuals with Exceptionalities in Society
- TCED 2600 Becoming an Education Professional
- TERG 2601 Reading Application in Content Area Early Years
- TERG 3701 Phonics in Reading Instruction
- TERG 3702 Developmental Reading Instruction
- TERG 3703 Assessment and Instruction in Reading

Preclinical Field Experiences
The preclinical experience is conducted in local schools and provides an opportunity for teacher candidates to complete an in-depth field experience prior to student teaching. This field experience requires a substantial time commitment, as teacher candidates spend the entire day in schools during designated weeks. The Early Childhood preclinical experience is scheduled during the fall and spring semesters. Applications for the preclinical experience must be submitted (1) one year in advance to Beeghly Hall Room 2101, by September 1 for fall preclinical, and February 1 for spring preclinical. Contact the Beeghly College of Liberal Arts, Social Sciences and Education, academic advisors for minimum preclinical prerequisites.

- ELIS 3701 Teaching Language Arts through Life Studies in the P-2 Classroom
- ELIS 3702 Teaching Math and Science in Grades P-2
- ELIS 3703 Assessing Learning in P-2 Classrooms
- ELIS 3704 Differentiating for Learning in the P-2 Classroom
- ELIS 4800 Teaching Language Arts in Grades 3-5
- ELIS 4801 Teaching Social Studies in Grades 3-5
- ELIS 4802 Teaching Math and Science in Grades 3-5
- ELIS 4803 Modern Classroom Assessment
- ELIS 4804 Differentiating for Learning in the 3-5 Classroom

Student Teaching
Students complete a 16 week student teaching experience. Students must pass the edTPA performance-based assessment with a minimum score of 37 during this experience.

- ELIS 4841 Supervised Student Teaching Primary/Primary Intervention Specialist
- ELIS 4842 Student Teaching Seminar Primary/Primary Intervention Specialist
Advisement

Advisement is provided by the academic advisors in the Beehly College of Liberal Arts, Social Sciences, and Education. Majors in this program must complete general education requirements, subject area curriculum requirements, reading course requirements, and professional education requirements. Prior to student teaching, all early childhood majors must complete a preclinical experience.

Required Assessments

The Ohio Assessments for Educators (OAE) assess the content area and professional (pedagogical) knowledge of candidates who are seeking initial Ohio educator license or adding a new license area. The assessments are aligned with Ohio’s New Learning Standards. Teacher candidates must pass these exams prior to student teaching:

- 001 Assessment of Professional Knowledge: Early Childhood (PK-3)
- 012 Early Childhood Education
- 090 Foundations of Reading
- 013 Early Childhood Special Education

Outcomes

The following learning outcomes are based on The Ohio Standards for the Teaching Profession. These standards were developed for use as a guide for teachers as they continually reflect upon and improve their effectiveness as educators throughout all of the stages of their careers. These standards serve as an important tool for teachers as they consider their growth and development in the profession. These standards in developing and content of our teacher education programs. They are interrelated and connect in teachers’ practice.

- Teachers understand student learning and development and respect the diversity of the students they teach.
- Teachers know and understand the content area for which they have instructional responsibility.
- Teachers understand and use varied assessments to inform instruction, evaluate and ensure student learning.
- Teachers plan and deliver effective instruction that advances the learning of each individual student.
- Teachers create learning environments that promote high levels of learning and achievement for all students.
- Teachers assume responsibility for professional growth, performance and involvement as an individual and as a member of a learning community.
- Teachers collaborate and communicate with students, parents, other educators, administrators and the community to support student learning. Teachers assume responsibility for professional growth, performance and involvement as an individual and as a member of a learning community.

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
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<tbody>
<tr>
<td>TCED 1500</td>
<td>Introduction to Becoming a Teacher First Year Experience Course BCOE</td>
<td>3</td>
</tr>
<tr>
<td>or ENGL 1549</td>
<td>Writing 1 with Support</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 1550</td>
<td>Writing 1</td>
<td>3</td>
</tr>
<tr>
<td>or ENGL 1549</td>
<td>Writing 1 with Support</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 1551</td>
<td>Writing 2</td>
<td>3</td>
</tr>
<tr>
<td>CMST 1545</td>
<td>Communication Foundations</td>
<td>3</td>
</tr>
<tr>
<td>MATH 2662</td>
<td>Mathematics for Elementary Teachers 2</td>
<td>4</td>
</tr>
<tr>
<td>ART 2648</td>
<td>Experience Art: Social and Behavioral Perspectives</td>
<td>3</td>
</tr>
<tr>
<td>MUHL 2621</td>
<td>Music Literature and Appreciation</td>
<td>3</td>
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<tr>
<td>or MUHL 2622</td>
<td>Popular Music in America</td>
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<td>PSYC 1560</td>
<td>General Psychology</td>
<td>3</td>
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<tr>
<td>PSYC 3755</td>
<td>Child Development</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 2651</td>
<td>Introduction to Language</td>
<td>3</td>
</tr>
<tr>
<td>HIST 2606</td>
<td>Turning Points in United States History 2</td>
<td>3</td>
</tr>
<tr>
<td>Select two of the following courses and one lab required for Primary content (3SH+3 SH+ 1SH=7 SH)</td>
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<td>ASTR 1504</td>
<td>Descriptive Astronomy</td>
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<td>ASTR 1504L</td>
<td>Astronomy Laboratory</td>
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<tr>
<td>BIOL 1505</td>
<td>Biology and the Modern World</td>
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<td>BIOL 1505L</td>
<td>Biology and the Modern World Laboratory</td>
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<td>Introduction to Environmental Science</td>
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<tr>
<td>ENST 1500L</td>
<td>Introduction to Environmental Science Lab</td>
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<tr>
<td>GEOL 2630</td>
<td>Weather</td>
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<td>GEOL 1504</td>
<td>The Dynamic Earth</td>
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Semester Hours 16-17

Spring

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<td>ART 2648</td>
<td>Experience Art: Social and Behavioral Perspectives</td>
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<td>CMST 1545</td>
<td>Communication Foundations</td>
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<td>TCED 2600</td>
<td>Becoming an Education Professional</td>
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<tr>
<td>ENGL 1551</td>
<td>Writing 2</td>
<td>3</td>
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<tr>
<td>or ENGL 1549</td>
<td>Writing 1 with Support</td>
<td>3-4</td>
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<tr>
<td>MATH 2662</td>
<td>Mathematics for Elementary Teachers 2</td>
<td>4</td>
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<tr>
<td>PSYC 1560</td>
<td>General Psychology</td>
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<tr>
<td>TCED 1500</td>
<td>Introduction to Becoming a Teacher First Year Experience Course BCOE</td>
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Semester Hours 17

Year 2

Fall

<table>
<thead>
<tr>
<th>COURSE</th>
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<tbody>
<tr>
<td>ENGL 2651</td>
<td>Introduction to Language</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 3703</td>
<td>Literature for Young Children</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 3755</td>
<td>Child Development</td>
<td>3</td>
</tr>
<tr>
<td>SPED 2630</td>
<td>Individuals with Exceptionalities in Society</td>
<td>3</td>
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</tbody>
</table>
SPED 2630L Individuals with Exceptionalities in Society Laboratory Experience 0
TERG 3701 Phonics in Reading Instruction 3
Natural Science elective 3
Semester Hours 18

Spring
ELIS 2601 Development, Learning and the Arts 3
HIST 2606 Turning Points in United States History 2 3
MUHL 2621 Music Literature and Appreciation 3
OR MUHL 2622 3
TERG 3702 Developmental Reading Instruction 3
Natural Science elective 3
Natural Science Lab 1
Semester Hours 16

Year 3
Fall
EDFN 3708 Education and Society 3
ELIS 3700 Building Pro-Social Learning Environments P-5 3
HEPE 2624 Physical Education for Children in Early Childhood Settings 3
PSYC 3709 Psychology of Education 3
TERG 3703 Assessment and Instruction in Reading 3
Semester Hours 15

Spring
ELIS 3701 Teaching Language Arts through Life Studies in the P-2 Classroom 3
ELIS 3702 Teaching Math and Science in Grades P-2 4
ELIS 3703 Assessing Learning in P-2 Classrooms 2
ELIS 3704 Differentiating for Learning in the P-2 Classroom 3
Semester Hours 12

Year 4
Fall
ELIS 4800 Teaching Language Arts in Grades 3-5 3
ELIS 4801 Teaching Social Studies in Grades 3-5 3
ELIS 4802 Teaching Math and Science in Grades 3-5 4
ELIS 4803 Modern Classroom Assessment 3
ELIS 4804 Differentiating for Learning in the 3-5 Classroom 3
Semester Hours 16

Spring
ELIS 4841 Supervised Student Teaching Primary/Primary Intervention Specialist 10
ELIS 4842 Student Teaching Seminar in Primary/Primary Intervention Specialists Education 2
TCED 5888E Seminar edTPA Review 1
Semester Hours 13

Total Semester Hours 123-124

Associate of Applied Science in Early Childhood Associate Pre-K

Patrick O'Leary, Program Coordinator
(330) 941-3343
pmoleary@ysu.edu

This associate degree leads to Associate Licensure in Pre-Kindergarten Teacher Licensure after passing the Pre-k Praxis examination. Most of the coursework can be applied toward a bachelor’s degree for Family and Consumer Science Instructor or Early Childhood Education. Within the framework of their required courses, students complete 300 hours of clinical/field work. This program normally requires four semesters of study averaging 15-18 hours per semester.

For more information, visit the Department of Human Ecology, Cushwa 3325 or call (330) 941-3344.

COURSE TITLE S.H.

FIRST YEAR REQUIREMENT -STUDENT SUCCESS
YSU 1500 Success Seminar 1-2
or SS 1500 Strong Start Success Seminar
or HONR 1500 Intro to Honors

General Education Requirements
ENGL 1550 Writing 1 3-4
or ENGL 1549 Writing 1 with Support
ENGL 1551 Writing 2 3
CMST 1545 Communication Foundations 3
A & H or NS Elective (one course must include a lab) 3
PSYC 1560 General Psychology 3

Major Requirements
HMEC 1550 Human Ecology Professions 1
CHFM 1514 Introduction to Early Childhood Education 3
CHFM 1530 Infants and Toddlers: Development and Care 3
SPED 2630 Individuals with Exceptionalities in Society 3
CHFM 2633 Early Childhood: Integrating Development and Education 3
CHFM 2650 Introduction to Assessment of Young Children 3
CHFM 2664 Managing Classroom Behavior and Staff Relationships in Early Childhood Settings 3
CHFM 2675 Integrated Curriculum for Prekindergarten 3
MUED 3722 Music in Early Childhood 3
CHFM 3733L Practicum Preprimary Settings 3
ART 3737 Pre-K, Visual Arts Education 3
CHFM 3750 Parent and Professional Relationships 3
PSYC 3755 Child Development 3
CHFM 3770 Wellness During the Early Childhood Years 3
CHFM 3790 Directed Practice in PreK Education 4
CHFM 3790S Directed Practice Seminar 2

Total Semester Hours 62-64

Year 1
Fall
YSU 1500 Success Seminar 1
CHFM 1514 Introduction to Early Childhood Education 3
ENGL 1550 Writing 1 3
HMEC 1550 Human Ecology Professions 1
PSYC 1560 General Psychology 3
ART 3737 Pre-K, Visual Arts Education 3
Semester Hours 14

Spring
CHFM 1530 Infants and Toddlers: Development and Care 3
ENGL 1551 Writing 2 3
CHFM 2633 Early Childhood: Integrating Development and Education 3
PSYC 3755 Child Development 3
Teaching of Foreign Languages (ACTFL) and the Writing Proficiency Test (WPT) as required by the American Council on the Teaching of Foreign Languages (ACTFL). Students enter student teaching in the last semester of study aligned with Ohio’s New Learning Standards. Teacher candidates must pass the edTPA performance-based assessment with a minimum score of 32 during this experience.

Field Experiences and Student Teaching

Students complete a number of field experiences to support the learning of content and best practices of teaching. Field experiences offer opportunities to provide varying levels of classroom support (observing, one-on-one tutoring, small group teaching, co-teaching, whole class teaching).

Pre-clinical Field Experiences

The preclinical experience is conducted in local schools and provides an opportunity for teacher candidates to complete an in-depth field experience prior to student teaching. This field experience requires a substantial time commitment, as teacher candidates spend the entire day in schools during designated weeks. This preclinical experience is scheduled during the fall semester. Applications for the preclinical experience must be submitted to the Office of Student Field Experience, one year in advance (by September 1). Teacher candidates must pass the edTPA performance-based assessment with a minimum score of 32 during this experience.

Bachelor of Science in Education in Italian (PK-12) - Multi-Age License

Dr. Jennifer Behney, Program Coordinator

Multi-Age Education (PK-12)

OVERVIEW

The program in Italian Education prepares students to become a teacher of foreign language at the high school, middle school, and elementary school levels in the state of Ohio. Graduates are fully licensed to teach Italian in Ohio (Multi-age P-12 Licensure) and are fully prepared in their knowledge of the target language, of best practices and standards in pedagogy, and in specific Second Language Acquisition (SLA) theories and foreign language education techniques. Students enter student teaching in the last semester of study with a level of Advanced Low in both oral and written communication in the target language, as measured by the Oral Proficiency Interview (OPI) and the Writing Proficiency Test (WPT) and as required by the American Council on the Teaching of Foreign Languages (ACTFL).
的要求。所有外语专业学生必须完成预临床经验。

**Preclinical Curriculum**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>FNLG 4801</td>
<td>Methods of Foreign Language Teaching</td>
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</tr>
<tr>
<td>EDFN 3710</td>
<td>Educational Assessment</td>
<td>3</td>
</tr>
<tr>
<td>SED 4827</td>
<td>Supervised Student Teaching: Language (K-12)</td>
<td>2</td>
</tr>
<tr>
<td>SED 4842A</td>
<td>Student Teaching Seminar for Secondary Education</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total Semester Hours</strong></td>
<td></td>
<td>123-126</td>
</tr>
</tbody>
</table>

1. Prerequisites for preclinical curriculum
2. Upper Division Courses

**BCOE Notes:**

- It is highly recommended that all teacher candidates meet with an academic advisor every semester.
- Freshmen, athletes, and students on warning and probation are required to meet with an advisor before registration.
- At the completion of 30 SH any teacher candidate who: 1) was required to and has not passed PRAXIS Core Exam(s), or 2) holds a GPA of 2.25 or below will be referred to Central Advising for advising and career services. If at a later date the teacher candidate passes all required parts of the Praxis Core Exam and attains a GPA of 2.25 or higher that student may return to BCOE for advising.

**Important Notes:**

- Neither admission to the University nor declaration of a major related to a teaching field guarantees admission to the BCOE’s Teacher Education Programs or candidacy for a teaching license.
- Formal Admission to Teacher Education (Upper-Division) is required before teacher candidates are allowed to enroll in certain junior and senior level courses in BCOE.
- Undetermined education majors must declare a major before applying for admission to a Teacher Education Program.
- Admission to a Teacher Education Program is obtained upon satisfactory completion of the following requirements:
  
  --- Minimum completion of 50 SH
  --- Minimum 2.75 overall GPA
- Meet one of the following criteria:
  
  --- Overall GPA 3.4 or better, **OR**
  --- ACT scores of Reading-21, English-18, Math-22, **AND/OR**
  --- SAT scores of Reading-450, Writing-430, Math-520, **AND/OR**
  --- Praxis CORE scores, Reading-156, Writing-162, Math-150

(Attach a copy of your CORE scores to the application)

- "B" average or better (A-C, B-B) for:
  
  --- ENGL 1550, ENGL 1551

If failure to meet “B” average above must also complete:

- **ENGL 2601** grade of “B” or better. **If you receive a “C” or below you will need to retake the course.**

  --- "B" average or better (B-B-B, A-B-C) across the following:
  
  --- EDFN 1501, CMST 1545
If student does not have a "B" average, student will be required to **retake one or more of these courses until the "B" average is achieved.**

- A grade of "C" or better is required in all required major courses. Courses taken as "CR/NC" will not count towards the major.
- Professional education and block courses may only be repeated **one time.**
- Minimum requirements for teaching licenses are determined by the Ohio Department of Education; if those requirements change, they become effective immediately at Youngstown State University. (YSU Undergraduate Catalog).

**Upper-Division Application Process**

- Upper division application and forms must be printed from the BCOE website.
- After completing a minimum of 50 SH, submit the following:
  - Upper Division application
  - Good Moral Character Statement
  - copy of BCI & FBI clearances
  - schedule an upper division interview with the BCOE Office of Student Services, room 2101, no later than:
- **Upper Division Application Deadline**
  - **September 1** for registration for Upper Division courses for Summer & Fall Semester
  - **February 1** for registration for Upper Division courses for Fall Semester

Each completed application is reviewed and approved by the Upper Division Admission and Retention Committee. If all requirements are met, the teacher candidate may register for Upper Division courses for the following semester. Upper Division courses are the courses designated with the "+" symbol. Applications submitted after the deadline will not be processed until the end of the respective semester.

**Program Notes:**

- If Math concentration is chosen, Math GER is not required. If Science concentration is chosen, Natural Science GER is fulfilled through subject area curriculum. If Language Arts concentration is chosen, Arts & Humanities GER is fulfilled through subject area curriculum. If Social Studies concentration is chosen, Social Sciences GER is fulfilled through subject area curriculum.
- Candidates will not be permitted to take the following professional education courses more than twice: EDFN 1501, EDFN 3708, PSYC 3709, SPED 2630, TERG 2601, 3701, 3702, 3703, 2610, 3711, TEMC 4802, SED 4900, ECIS 2629, ECIS 3700, all preclinical experience courses, student teaching, and student teaching seminar.
- If the program is concerned regarding teacher candidate performance in the preclinical experience, as determined by CPAST criteria, the program coordinator may require the teacher candidate to complete an additional preclinical experience prior to the student teaching experience.

**Preclinical Application with Request for Graduation Evaluation**

- Preclinical application is completed on TaskStream. Directions are available on the BCOE website.
- Preclinical application and graduation evaluation request must be submitted one year prior to the intended preclinical semester no later than:
  - **September 1** for Fall preclinical
  - **February 1** for Spring preclinical
- Preclinical candidates are screened for eligibility based on GPA and course completion.

**Student Teaching:**

- Prerequisites:
  - BCOE Upper Division and Senior status,
  - Overall 2.75 GPA
  - Minimum of 2.67 GPA in subject area curriculum and professional education courses with no grade less than a "C" (each computed individually),
  - Passage of OAE test(s) and ACTFL tests for foreign language.
  - Instructions for completing the Student Teaching Application and Forms are available on BCOE website. The application and forms must be completed and printed from the BCOE website and submitted to the BCOE Office of Student Services no later than:
    - **September 1** for registration for Fall Semester
    - **February 1** for registration for Spring Semester

**Graduation Process:**

- Apply for graduation during the first three weeks of the semester you plan to graduate. Graduation evaluation must be completed in advance of application for graduation.

**Completing a Bachelor of Science in Education without Licensure:**

- Teacher candidates who choose to graduate without licensure must apply for approval in the BCOE Office of Student Services.
- Once approved, teacher candidates graduating without licensure must take TCED 4830 (3 SH) capstone in place of student teaching.

### Year 1

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Semester Hours</th>
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<tr>
<td>Fall</td>
<td>YSU 1500</td>
<td>Success Seminar</td>
<td>1 S.H.</td>
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<tr>
<td>Fall</td>
<td>ITAL 1506</td>
<td>Elementary Italian 2</td>
<td>4 S.H.</td>
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<tr>
<td>Fall</td>
<td>ENGL 1550</td>
<td>Writing 1</td>
<td>3-4 S.H.</td>
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<td>Writing 1 with Support</td>
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<td>Fall</td>
<td>MATH 2623</td>
<td>Quantitative Reasoning</td>
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<td>Or:</td>
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<tr>
<td>Fall</td>
<td>MATH 2652</td>
<td>Mathematics for Early Childhood Teachers 2</td>
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<td>Or:</td>
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<tr>
<td>Fall</td>
<td>PHIL 2619</td>
<td>Introduction to Logic</td>
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<tr>
<td>Fall</td>
<td>STAT 2601</td>
<td>Introductory Statistics</td>
<td>3 S.H.</td>
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<td>TCED 1500</td>
<td>Introduction to Becoming a Teacher First Year Experience Course BCOE</td>
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**Semester Hours:** 17-18

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<td>Writing 2 (GER requirement)</td>
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<tr>
<td>Spring</td>
<td>ITAL 2608</td>
<td>Intermediate Italian 2</td>
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<td>CMST 1545</td>
<td>Communication Foundations (GER requirement)</td>
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<td>Spring</td>
<td>PSYC 1560</td>
<td>General Psychology (GER #1)</td>
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<td>Spring</td>
<td>Arts and Humanities GER</td>
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**Year 2**

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<tr>
<td>Fall</td>
<td>EDFN 1501</td>
<td>Introduction to Education</td>
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</tr>
<tr>
<td>Fall</td>
<td>ITAL 2607</td>
<td>Intermediate Italian 1</td>
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<tr>
<td>Fall</td>
<td>Natural Science/ Lab GER</td>
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<tr>
<td>Fall</td>
<td>Social and Personal Awareness GER</td>
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**Semester Hours:** 14

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<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>Spring</td>
<td>SPED 2630</td>
<td>Individuals with Exceptionalities in Society</td>
<td>3 S.H.</td>
</tr>
</tbody>
</table>
Bachelor of Science in Education in Middle Childhood Education (4-9), Mathematics-Language Arts Concentration

Dr. Kathleen Cripe, Program Coordinator

OVERVIEW

In cooperation with various discipline departments in the University, the Department of Teacher Education and Leadership Studies offers a four-year middle childhood license approved by the Ohio Department of Education. The Middle Childhood License (Grades 4-9), Bachelor of Science in Education degree requires a minimum of 127 semester hours of course work (each concentration area requires a specific number of semester hours) including a semester of student teaching. Please refer to the four year plan for additional information. This teaching license requires passage of the Ohio Assessments for Educators in order to be eligible to student teach.

EMPLOYMENT OPPORTUNITIES

Graduates of the Middle Childhood Program Math and Language Arts Concentration will be qualified to teach in the grades 4-9 Math and Language Arts classroom. Additional opportunities may be available in the private sector to tutor students. It is recommended that students in this major consider adding the Middle Childhood Generalist Endorsement to increase marketability.

Professional Dispositions:

In addition to the above learning outcomes, teacher candidates are expected to display the following professional dispositions:

- Creating fairness in the classroom
- Providing an inclusive environment that is safe and conducive to learning
- Demonstrating the belief that all students can learn
- Fostering collaborative relationships to support student learning and well-being
- Exhibiting professional skills

FIELD EXPERIENCES AND STUDENT TEACHING

Students complete a number of field experiences to support the learning of content and best practices of teaching. Field experiences offer opportunities to provide varying levels of classroom support (observing, one-on-one tutoring, small group teaching, co-teaching, whole class teaching).

Preclinical Field Experiences

The preclinical experience is conducted in local schools and provides an opportunity for teacher candidates to complete an in-depth field experience prior to student teaching. This field experience requires a substantial time...
commitment, as teacher candidates spend the entire day in schools during designated weeks. The Middle Childhood preclinical experience is scheduled during the fall semester. Applications for the preclinical experience must be submitted to the Office of Student Field Experience one year in advance (September 1).

- TEMC 3702 Teaching & Learning in Middle Schools
- And
- TEMC 4801 The Middle School Learning Community
- And
- TEMC 3704 Teaching Mathematics in the Middle School
- And
- TEMC 3706 Teaching Language Arts in the Middle School

Student Teaching

Students complete a 16 week student teaching experience. Students must pass the edTPA performance-based assessment with a minimum score of 37 during this experience.

- TEMC 4803 Student Teaching Seminar for Middle Childhood Education
- And
- TEMC 4802 Student Teaching: Middle Childhood

ADVICE

Advisement is provided by the academic advisors in the Beeghly College of Liberal Arts, Social Sciences, and Education. Majors in this program must complete general education requirements, subject area curriculum requirements, reading course requirements, and professional education requirements. Prior to student teaching, all middle childhood majors must complete a preclinical experience.

REQUIRED ASSESSMENTS

The Ohio Assessments for Educators (OAE) assesses the content area and professional (pedagogical) knowledge of candidates who are seeking initial Ohio educator license or adding a new licence area. The assessments are aligned with Ohio's New Learning Standards. Teacher candidates must pass these exams prior to student teaching.

002 Assessment of Professional Knowledge (All MCE Candidates)
028 Middle Grades English Language Arts (for those with English Language Arts concentration)
030 Middle Grades Mathematics (for those with Mathematics concentration)
090 Foundations of Reading

ENDORSEMENTS

The following endorsements are available to individuals holding this teaching license and may increase marketability: K-12 TESOL Endorsement, K-12 Reading Endorsement, Middle Childhood Generalist Endorsement (enables teaching in content areas not included in current course of study).

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>YSU 1500</td>
<td>Success Seminar</td>
<td>1/2</td>
</tr>
<tr>
<td>or SS 1500</td>
<td>Strong Start Success Seminar</td>
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</tr>
<tr>
<td>or HONR 1500</td>
<td>Intro to Honors</td>
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</table>

| General Education Requirements |
|-------------------------------|-------------------------------|
| Core Competencies             | 12                            |

<table>
<thead>
<tr>
<th>ENGL 1550</th>
<th>Writing 1 (requires a B average) or ENGL 1549 Writing 1 with Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 1551</td>
<td>Writing 2 (requires a B average)</td>
</tr>
<tr>
<td>CMST 1545</td>
<td>Communication Foundations</td>
</tr>
</tbody>
</table>

Mathematics Requirement

One of the following courses may be taken to fulfill Math GER

Math 2652 is preferred math course if you are required to take Math Praxis Core

- MATH 2623 | Quantitative Reasoning
- OR:
- MATH 2652 | Mathematics for Early Childhood Teachers 2
- (Preferred course if required to take Math Praxis Core)
- OR:
- MATH 2665 | Foundations of Middle School Mathematics 2
- (Mathematics Concentration takes this one)

Some courses are categorized in more than one knowledge domain. Courses can only be used once within the General Education model. Courses listed for GER's below are required in this program. See page 2 for other General Education recommendations.

<table>
<thead>
<tr>
<th>Arts and Humanities</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Sciences (2 courses, 1 lab)</td>
<td>7</td>
</tr>
<tr>
<td>Social Science</td>
<td>6</td>
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<tr>
<td>PSYC 1560</td>
<td>General Psychology</td>
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<tr>
<td>Social Science GER</td>
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<tr>
<td>Social and Personal Awareness</td>
<td>6</td>
</tr>
</tbody>
</table>

Major Requirements

- TCED 1500 | Introduction to Becoming a Teacher First Year Experience Course BCOE |

Mathematics Concentration

- MATH 1564 | Foundations of Middle School Mathematics 1 |
- MATH 2665 | Foundations of Middle School Mathematics 2 |
- MATH 3767 | Algebra/Geometry for Middle School Teachers 1 |
- MATH 3768 | Algebra/Geometry for Middle School Teachers 2 |
- MATH 4869 | Functions, Calculus, and Applications for Middle School Teachers |
- MATH 4870 | Mathematics Seminar for Middle School Teachers |
- STAT 2601 | Introductory Statistics |

Language Arts Concentration

- CMST 2656 | Interpersonal Communication |
- ENGL 2610 | World Literature (AH/SPA) |
- ENGL 2618 | American Literature and Diversity (AH/SPA) |
- ENGL 2651 | Introduction to Language (SS/SPA) |
- ENGL 3700 | Literary Study |
- ENGL 3704 | Literature for Middle School Readers |
- ENGL 3730 | Teaching Language Arts |
- ENGL 3739 | Writing for Middle School Teachers |

Professional Education Curriculum

- EDFN 1501 | Introduction to Education |
- PSYC 3709 | Psychology of Education |
- SPED 2630 | Individuals with Exceptionalities in Society |
- EDFN 3708 | Education and Society |
- TEMC 3702 | Teaching & Learning in Middle Schools |

Reading Course Requirements

- TERG 2610 | Reading Application in Content Areas Middle Years |
- TERG 3701 | Phonics in Reading Instruction |
- TERG 3702 | Developmental Reading Instruction |
- TERG 3703 | Assessment and Instruction in Reading |

Preclinical Curriculum
need to retake the course.

_____ ENGL 2601 grade of "B" or better.
If failure to meet "B" average above must also complete:
_____ ENGL 1550  _____ ENGL 1551
(Attach a copy of your CORE scores to the application)

_____ Praxis CORE scores, Reading-156, Writing-162, Math-150
_____ SAT scores of Reading-450, Writing-430, Math-520,
_____ ACT scores of Reading-21, English-18, Math-22, AND/OR
_____ Praxis CORE scores, Reading-450, Writing-430, Math-520, AND/OR
(Attach a copy of your CORE scores to the application)

**Advisement:**
- It is highly recommended that all teacher candidates meet with an academic advisor every semester.
- Freshmen, athletes, and students on warning and probation are required to meet with an advisor before registration.
- At the completion of 30 SH any teacher candidate who: 1) was required to and has not passed PRAXIS Core Exam(s), or 2) holds a GPA of 2.25 or below will be referred to Central Advising for advising and career services. If at a later date the teacher candidate passes all required parts of the Praxis Core Exam and attains a GPA of 2.25 or higher that student may return to BCOE for advising.

**Important Notes:**
- Neither admission to the University nor declaration of a major related to a teaching field guarantees admission to the BCOE’s Teacher Education Programs or candidacy for a teaching license.
- Formal Admission to Teacher Education (Upper-Division) is required before teacher candidates are allowed to enroll in certain junior and senior level courses in BCOE.
- Undetermined education majors must declare a major before applying for admission to a Teacher Education Program.
- Admission to a Teacher Education Program is obtained upon satisfactory completion of the following requirements:
  - Minimum completion of 50 SH
  - Minimum 2.75 overall GPA
  - Meet one of the following criteria:
    - Overall GPA 3.4 or better, OR
    - ACT scores of Reading-21, English-18, Math-22, AND/OR
    - SAT scores of Reading-450, Writing-430, Math-520, AND/OR
    - Praxis CORE scores, Reading-156, Writing-162, Math-150

**Upper-Division Application Process**
- Upper division application and forms must be printed from the BCOE website.
- After completing a minimum of 50 SH, submit the following:
  - Upper Division application
  - Good Moral Character Statement
  - copy of BCI & FBI clearances
  - schedule an upper division interview with the BCOE Office of Student Services, room 2101, no later than:
- Upper Division Application Deadline
  - September 1—to register for Upper Division Courses for Spring
  - February 1—to register for Upper Division courses for Summer & Fall
- Each completed application is reviewed and approved by the Upper Division Admission and Retention Committee. If all requirements are met, the teacher candidate may register for Upper Division courses for the following semester. Upper Division courses are the courses designated with the “*” symbol. Applications submitted after the deadline will not be processed until the end of the respective semester.

**Program Notes:**
- If Math concentration is chosen, Math GER is not required. If Science concentration is chosen, Natural Science GER is fulfilled through subject area curriculum. If Language Arts concentration is chosen, Arts & Humanities GER is fulfilled through subject area curriculum. If Social Studies concentration is chosen, Social Sciences GER is fulfilled through subject area curriculum.
- Candidates will not be permitted to take the following professional education courses more than twice: EDFN 1501, EDFN 3708, PSYC 3709, SPED 2630, TERG 2601, 3701, 3702, 3703, 2610, 3711, TEMC 4802, SED 4800, ECIS 2629, ECIS 3700, all preclinical experience courses, student teaching, and student teaching seminar.
- If the program is concerned regarding teacher candidate performance in the preclinical experience, as determined by CPAST criteria, the program coordinator may require the teacher candidate to complete an additional preclinical experience prior to the student teaching experience.

**Preclinical Application with Request for Graduation Evaluation**
- Preclinical application is completed on TaskStream. Directions are available on the BCOE website.
- Preclinical application and graduation evaluation request must be submitted one year prior to the intended preclinical semester no later than:
  - September 1—for Fall preclinical
  - February 1—for Spring preclinical
- Preclinical candidates are screened for eligibility based on GPA and course completion.
Completing a Bachelor of Science in Education without Licensure:

Student Teaching:

- Prerequisites:
  - BCOE Upper Division and Senior status,
  - Overall 2.75 GPA
  - Minimum of 2.67 GPA in subject area curriculum and professional education courses with no grade less than a “C” (each computed individually),
  - Passage of OAE test(s) and ACTFL tests for foreign language.
- Instructions for completing the Student Teaching Application and Forms are available on BCOE website. The application and forms must be completed and printed from the BCOE website and submitted to the BCOE Office of Student Services no later than:
  - September 1—to Student Teach the following Spring Semester
  - February 1—to Student Teach the following Fall Semester

Graduation Process:

- Apply for graduation during the first three weeks of the semester you plan to graduate. Graduation evaluation must be completed in advance of application for graduation.

Completing a Bachelor of Science in Education without Licensure:

- Teacher candidates who choose to graduate without licensure must apply for approval in the BCOE Office of Student Services.
- Once approved, teacher candidates graduating without licensure must take TCED 4830 (3 SH) capstone in place of student teaching.

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Learning Outcomes

The following learning outcomes are based on The Ohio Standards for the Teaching Profession. These standards were developed for use as a guide for teachers as they continually reflect upon and improve their effectiveness as educators throughout all of the stages of their careers. These standards serve as an important tool for teachers as they consider their growth and development in the profession. These standards in developing and content of our teacher education programs. They are interrelated and connect in teachers’ practice.

- Teachers understand student learning and development and respect the diversity of the students they teach.
- Teachers know and understand the content area for which they have instructional responsibility.
- Teachers understand and use varied assessments to inform instruction, evaluate and ensure student learning.
- Teachers plan and deliver effective instruction that advances the learning of each individual student.
OVERVIEW

In cooperation with various academic discipline departments in the University, the Department of Teacher Education and Leadership Studies offers a four-year Middle Childhood Education Program (grades 4-9), Math and Social Studies Concentration, approved by the Ohio Department of Education. The Middle Childhood, Math and Social Studies License (Grades 4-9), Bachelor of Science in Education degree requires a minimum of 137 semester hours of course work. This teaching field also requires passage of the Ohio Assessments for Educators in order to be eligible to student teach.

EMPLOYMENT OPPORTUNITIES

Graduates of the Middle Childhood Program will be qualified to teach in the grades 4-9 classroom. Additional opportunities may be available in the private sector for tutor students. It is recommended that students in this major consider adding the Middle Childhood Generalist Endorsement to increase marketability.

Professional Dispositions:

In addition to the above learning outcomes, teacher candidates are expected to display the following professional dispositions:

- Creating fairness in the classroom
- Providing an inclusive environment that is safe and conducive to learning
- Demonstrating the belief that all students can learn
- Fostering collaborative relationships to support student learning and well-being
- Exhibiting professional skills

FIELD EXPERIENCES AND STUDENT TEACHING

Students complete over 150 hours of preclinical experiences, and additional field experiences, which are included in the following courses and offer opportunities to provide varying levels of classroom support (observing, one-on-one tutoring, small group teaching, co-teaching, whole class teaching).

Field Experiences:

- EDFN 1501 Introduction to Education
- EDFN 3708 Education and Society
- SPED 2630 Individuals with Exceptionalities in Society
- TERG 3701 Phonics in Reading Instruction
- TERG 3702 Developmental Reading Instruction
- TERG 3703 Assessment and Instruction in Reading
- TERG 2610 Reading Application in Content Areas Middle Years

Preclinical Field Experiences:

The preclinical experience is conducted in local schools and provides an opportunity for teacher candidates to complete an in-depth field experience prior to student teaching. This field experience requires a substantial time commitment, as teacher candidates spend the entire day in schools during designated weeks. The Middle Childhood preclinical experience is scheduled during the fall semester. Applications for the preclinical experience must be submitted (1) one year in advance to BCOE Room 2101, by September 1 for the preclinical experience. Contact the Beeghly College of Education, academic advisors for minimum preclinical prerequisites.

- TECM 3702 Teaching & Learning in Middle Schools
- TECM 4801 The Middle School Learning Community
- TECM 3703 Thematic Instruction and Assessment Methods in Social Studies
- TECM 3704 Teaching Mathematics in the Middle School

Student Teaching:

Students complete a 16 week student teaching experience. Students must pass the edTPA performance-based assessment with a minimum score of 37 during this experience.

- TECM 4803 Student Teaching Seminar for Middle Childhood Education
- TECM 4802 Student Teaching: Middle Childhood

Bachelor of Science in Education in Middle Childhood Education (4-9), Mathematics-Social Studies Concentration

Dr. Kathleen Cripe, Program Coordinator

• Teachers create learning environments that promote high levels of learning and achievement for all students.
• Teachers assume responsibility for professional growth, performance and involvement as an individual and as a member of a learning community.
• Teachers collaborate and communicate with students, parents, other educators, administrators and the community to support student learning. Teachers assume responsibility for professional growth, performance and involvement as an individual and as a member of a learning community.

The learning outcomes for this program, align with the 5 Standards of the Association for Middle Level Education (AMLE):

- Middle level teacher candidates understand, use, and reflect on the major concepts, principles, theories, and research related to young adolescent development and use that knowledge in their practice. They demonstrate their ability to apply this knowledge when making curricular decisions, planning and implementing instruction, participating in middle level programs and practices, and providing healthy and effective learning environments for all young adolescents.
- Middle level teacher candidates understand and use the central concepts, standards, research, and structures of content to plan and implement curriculum that develops all young adolescents’ competence in subject matter. They use their knowledge and available resources to design, implement, and evaluate challenging, developmentally responsive curriculum that results in meaningful learning outcomes. Middle level teacher candidates demonstrate their ability to assist all young adolescents in understanding the interdisciplinary nature of knowledge. They design and teach curriculum that is responsive to all young adolescents’ local, national, and international histories, language/dialects, and individual identities (e.g., race, ethnicity, culture, age, appearance, ability, sexual orientation, socioeconomic status, family composition).
- Middle level teacher candidates understand the major concepts, principles, theories, and research underlying the philosophical foundations of developmentally responsive middle level programs and schools, and they work successfully within middle level organizational components.
- Middle level teacher candidates understand, use, and reflect on the major concepts, principles, theories, and research related to data-informed instruction and assessment. They employ a variety of developmentally appropriate instructional strategies, information literacy skills, and technologies to meet the learning needs of all young adolescents (e.g., race, ethnicity, culture, age, appearance, ability, sexual orientation, socioeconomic status, family composition).
- Middle level teacher candidates understand their complex roles as teachers of young adolescents. They engage in practices and behaviors that develop their competence as middle level professionals. They are informed advocates for young adolescents and middle level education, and work successfully with colleagues, families, community agencies, and community members. Middle level teacher candidates demonstrate positive dispositions and engage in ethical professional behaviors.

Bachelor of Science in Education in Middle Childhood Education (4-9), Mathematics-Social Studies Concentration

Dr. Kathleen Cripe, Program Coordinator
ADVICE

Advisement is provided by the academic advisors in the Beeghly College of Liberal Arts, Social Sciences, and Education. Majors in this program must complete general education requirements, subject area curriculum requirements, reading course requirements, and professional education requirements. Prior to student teaching, all adolescent/young adult majors must complete a preclinical experience.

REQUIRED ASSESSMENTS

The Ohio Assessments for Educators (OAE) assess the content area and professional (pedagogical) knowledge of candidates who are seeking initial Ohio educator license or adding a new licence area. The assessments are aligned with Ohio’s New Learning Standards. Teacher candidates must pass these exams prior to student teaching.

002 Assessment of Professional Knowledge (All MCE Candidates)
030 Middle Grades Mathematics (for those with Mathematics concentration)
031 Middle Grades Social Studies (for those with Social Studies concentration)
090 Foundations of Reading

ENDORSEMENTS

The following endorsements are available to individuals holding this teaching license and may increase marketability: K-12 TESOL Endorsement, K-12

ENDORSEMENTS

MATH 3768
MATH 3767
MATH 3766
MATH 3765
MATH 3764

Some courses are required in more than one Knowledge Domain. Courses can only be used once within the General Education model. Courses listed for Knowledge Domains below are required in this program. See page 2 for other General Education recommendations.

Arts and Humanities (6 s.h.)
Natural Sciences (2 courses, 1 with lab) (7 s.h.)
Social Science GER met in major
PSYC 1560 General Psychology
Social and Personal Awareness (2 courses)

Major Requirements - Mathematics Concentration

TCED 1500 Introduction to Becoming a Teacher First Year Experience Course BCOE
MATH 1564 Foundations of Middle School Mathematics 1
MATH 2665 Foundations of Middle School Mathematics 2
MATH 3767 Algebra/Geometry for Middle School Teachers 1
MATH 3768 Algebra/Geometry for Middle School Teachers 2

MATH 4869 Functions, Calculus, and Applications for Middle School Teachers
MATH 4870 Mathematics Seminar for Middle School Teachers
STAT 2601 Introductory Statistics

Social Studies Concentration

HIST 1511 World Civilization to 1500 (SS)
HIST 1512 World Civilization from 1500 (SS/SPA)
HIST 2606 Turning Points in United States History 2 (SS/SPA)
HIST 3748 History of Ohio
GEOG 2640 Human Geography (SS/SPA)
GEOG 3717 Geography of Europe
POL 1560 American Government (SS)
POL 2640 Contemporary World Governments (SS/SPA)
POL 2695 Model United Nations
ECON 2610 Principles 1: Microeconomics (SS)
ECON 2631 Introductory Macroeconomics for Education Majors (SS)
ANTH 1500 Introduction to Anthropology (SS)

Professional Education Curriculum

EDFN 1501 Introduction to Education
PSYC 3709 Psychology of Education
SPED 2630 Individuals with Exceptionalities in Society 1
EDFN 3708 Education and Society
TEMC 3702 Teaching & Learning in Middle Schools 1,2

Reading Course Requirements

TERG 3701 Phonics in Reading Instruction
TERG 2610 Reading Application in Content Areas Middle Years
TERG 3702 Developmental Reading Instruction 1
TERG 3703 Assessment and Instruction in Reading 2

Preclinical Curriculum

TEMC 4801 The Middle School Learning Community 2
TEMC 4804 Middle Level Instructional Design and Student Outcomes 2
TEMC 3703 Thematic Instruction and Assessment Methods in Social Studies 2
TEMC 3704 Teaching Mathematics in the Middle School 2

Student Teaching Curriculum

TEMC 4802 Student Teaching: Middle Childhood 2
TEMC 4803 Student Teaching Seminar for Middle Childhood Education 2

Total Semester Hours 151-154

BCOE Notes:

Advisement:

• It is highly recommended that all teacher candidates meet with an academic advisor every semester.
• Freshmen, athletes, and students on warning and probation are required to meet with an advisor before registration.
• At the completion of 30 SH any teacher candidate who: 1) was required to and has not passed PRAXIS Core Exam(s), or 2) holds a GPA of 2.25 or below will be referred to Central Advising for advising and career services. If at a later date the teacher candidate passes all required parts of the Praxis Core Exam and attains a GPA of 2.25 or higher that student may return to BCOE for advising.
Important Notes:

- Neither admission to the University nor declaration of a major related to a teaching field guarantees admission to the BCOE's Teacher Education Programs or candidacy for a teaching license.
- Formal Admission to Teacher Education (Upper-Division) is required before teacher candidates are allowed to enroll in certain junior and senior level courses in BCOE.
- Undetermined education majors must declare a major before applying for admission to a Teacher Education Program.
- Admission to a Teacher Education Program is obtained upon satisfactory completion of the following requirements:
  
  1. Minimum completion of 50 SH
  2. Minimum 2.75 overall GPA
  3. Meet one of the following criteria:
     1. Overall GPA 3.4 or better, OR
     2. ACT scores of Reading-21, English-18, Math-22, AND/OR
     3. SAT scores of Reading-450, Writing-430, Math-520, AND/OR
     4. Praxis CORE scores, Reading-156, Writing-162, Math-150

(Attach a copy of your CORE scores to the application)

- “B” average or better (A-C, B-B) for:
  1. ENGL 1550
  2. ENGL 1551

If failure to meet “B” average above must also complete:

- ENGL 2601 grade of “B” or better. If you receive a “C” or below you will need to retake the course.

- “B” average or better (B-B-B, A-B-C) across the following:
  1. EDFN 1501
  2. CMST 1545
  3. SPED 2630
  4. ENGL 2651 or MATH 1564 or HIST 2606/1511 or BIOL 1505

If student does not have a “B” average, student will be required to retake one or more of these courses until the “B” average is achieved.

- A grade of “C” or better is required in all required major courses. Courses taken as "CR/NC" will not count toward the major
- Professional education and block courses may only be repeated one time.
- Minimum requirements for teaching licenses are determined by the Ohio Department of Education; if those requirements change, they become effective immediately at Youngstown State University. (YSU Undergraduate Catalog).

Upper-Division Application Process

- Upper division application and forms must be printed from the BCOE website.

- After completing a minimum of 50 SH, submit the following:
  1. Upper Division application
  2. Good Moral Character Statement
  3. copy of BCI & FBI clearances
  4. schedule an upper division interview with the BCOE Office of Student Services, room 2101, no later than:
  5. Upper Division Application Deadline
     1. September 1—to register for Upper Division Courses for Spring
     2. February 1—to register for Upper Division courses for Summer & Fall

- Each completed application is reviewed and approved by the Upper Division Admission and Retention Committee. If all requirements are met, the teacher candidate may register for Upper Division courses for the following semester. Upper Division courses are the courses designated with the * * symbol. Applications submitted after the deadline will not be processed until the end of the respective semester.

Program Notes:

- If Math concentration is chosen, Math GER is not required. If Science concentration is chosen, Natural Science GER is fulfilled through subject area curriculum. If Language Arts concentration is chosen, Arts & Humanities GER is fulfilled through subject area curriculum. If Social Studies concentration is chosen, Social Sciences GER is fulfilled through subject area curriculum.

- Candidates will not be permitted to take the following professional education courses more than twice: EDFN 1501, EDFN 3708, PSYC 3709, SPED 2630, TERG 2601, 3701, 3702, 3703, 2610, 3711, TEMC 4802, SED 4800, ECIS 2629, ECIS 3700, all preclinical experience courses, student teaching, and student teaching seminar.
- If the program is concerned regarding teacher candidate performance in the preclinical experience, as determined by CPAST criteria, the program coordinator may require the teacher candidate to complete an additional preclinical experience prior to the student teaching experience.

Preclinical Application with Request for Graduation Evaluation

- Preclinical application is completed on TaskStream. Directions are available on the BCOE website.
- Preclinical application and graduation evaluation request must be submitted one year prior to the intended preclinical semester no later than:
  1. September 1—for Fall preclinical
  2. February 1—for Spring preclinical
- Preclinical candidates are screened for eligibility based on GPA and course completion.

Student Teaching:

- Prerequisites:
  1. BCOE Upper Division and Senior status,
  2. Overall 2.75 GPA
  3. Minimum of 2.67 GPA in subject area curriculum and professional education courses with no grade less than a “C” (each computed individually),
  4. Passage of OAE test(s) and ACTFL tests for foreign language.
- Instructions for completing the Student Teaching Application and Forms are available on the BCOE website. The application and forms must be completed and printed from the BCOE website and submitted to the BCOE Office of Student Services no later than:
  1. September 1—to Student Teach the following Spring Semester
  2. February 1—to Student Teach the following Fall Semester

Graduation Process:

- Apply for graduation during the first three weeks of the semester you plan to graduate. Graduation evaluation must be completed in advance of application for graduation.

Completing a Bachelor of Science in Education without Licensure:

- Teacher candidates who choose to graduate without licensure must apply for approval in the BCOE Office of Student Services.
- Once approved, teacher candidates graduating without licensure must take TCED 4830 (3 SH) capstone in place of student teaching.
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**Learning Outcomes**

The following learning outcomes are based on The Ohio Standards for the Teaching Profession. These standards were developed for use as a guide for teachers as they continually reflect upon and improve their effectiveness as educators throughout all of the stages of their careers. These standards serve as an important tool for teachers as they consider their growth and development in the profession. These standards in developing and content of our teacher education programs. They are interrelated and connect in teachers’ practice.

- Teachers understand student learning and development and respect the diversity of the students they teach.
- Teachers know and understand the content area for which they have instructional responsibility.
- Teachers understand and use varied assessments to inform instruction, evaluate and ensure student learning.
- Teachers plan and deliver effective instruction that advances the learning of each individual student.
- Teachers create learning environments that promote high levels of learning and achievement for all students.
- Teachers assume responsibility for professional growth, performance and involvement as an individual and as a member of a learning community.
- Teachers collaborate and communicate with students, parents, other educators, administrators and the community to support student learning. Teachers assume responsibility for professional growth, performance and involvement as an individual and as a member of a learning community.

The learning outcomes for this program, align with the 5 Standards of the Association for Middle Level Education (AMLE):

- Middle level teacher candidates understand, use, and reflect on the major concepts, principles, theories, and research related to young adolescent development and use that knowledge in their practice. They demonstrate their ability to apply this knowledge when making curricular decisions, planning and implementing instruction, participating in middle level programs and practices, and providing healthy and effective learning environments for all young adolescents.
- Middle level teacher candidates understand and use the central concepts, standards, research, and structures of content to plan and implement curriculum that develops all young adolescents’ competence in subject matter. They use their knowledge and available resources to design, implement, and evaluate challenging, developmentally responsive
curriculum that results in meaningful learning outcomes. Middle level teacher candidates demonstrate their ability to assist all young adolescents in understanding the interdisciplinary nature of knowledge. They design and teach curriculum that is responsive to all young adolescents’ local, national, and international histories, language/dialects, and individual identities (e.g., race, ethnicity, culture, age, appearance, ability, sexual orientation, socioeconomic status, family composition).

- Middle level teacher candidates understand the major concepts, principles, theories, and research underlying the philosophical foundations of developmentally responsive middle level programs and schools, and they work successfully within middle level organizational components.
- Middle level teacher candidates understand use, and reflect on the major concepts, principles, theories, and research related to data-informed instruction and assessment. They employ a variety of developmentally appropriate instructional strategies, information literacy skills, and technologies to meet the learning needs of all young adolescents (e.g., race, ethnicity, culture, age, appearance, ability, sexual orientation, socioeconomic status, family composition).
- Middle level teacher candidates understand their complex roles as teachers of young adolescents. They engage in practices and behaviors that develop their competence as middle level professionals. They are informed advocates for young adolescents and middle level education, and work successfully with colleagues, families, community agencies, and community members. Middle level teacher candidates demonstrate positive dispositions and engage in ethical professional behaviors.

Bachelor of Science in Education in Middle Childhood Education (4-9), Mathematics-Science Concentration

Dr. Kathleen Cripe, Program Coordinator

OVERVIEW
In cooperation with various academic discipline departments in the University, the Department of Teacher Education and Leadership Studies offers a four-year Middle Childhood Education Program (grades 4-9), Math and Science Concentration, approved by the Ohio Department of Education. The Middle Childhood Math and Science License (Grades 4-9), Bachelor of Science in Education degree requires a minimum of 136 semester hours of course work. This teaching field also requires passage of the Ohio Assessments for Educators in order to be eligible to student teach.

EMPLOYMENT OPPORTUNITIES
Graduates of the Middle Childhood Program will be qualified to teach Math and Science in the grades 4-9 Math and/or Science classroom. Additional opportunities may be available in the private sector to tutor students. It is recommended that students in this major consider adding the Middle Childhood Generalist Endorsement to increase marketability.

Professional Dispositions:
In addition to the above learning outcomes, teacher candidates are expected to display the following professional dispositions:

- Creating fairness in the classroom
- Providing an inclusive environment that is safe and conducive to learning
- Demonstrating the belief that all students can learn
- Fostering collaborative relationships to support student learning and well-being
- Exhibiting professional skills

FIELD EXPERIENCES AND STUDENT TEACHING
Students complete a number of field experiences to support the learning of content and best practices of teaching. Field experiences offer opportunities to provide varying levels of classroom support (observing, one-on-one tutoring, small group teaching, co-teaching, whole class teaching).

Preclinical Field Experiences
The preclinical experience is conducted in local schools and provides an opportunity for teacher candidates to complete an in-depth field experience prior to student teaching. This field experience requires a substantial time commitment, as teacher candidates spend the entire day in schools during designated weeks. The Middle Childhood preclinical experience is scheduled during the fall semester. Applications for the preclinical experience must be submitted to the Office of Student Field Experience one year in advance (September 1).

- TEMC 3702 Teaching & Learning in Middle Schools
- TEMC 4801 The Middle School Learning Community
- TEMC 3704 Teaching Mathematics in the Middle School
- TEMC 3705 The Teaching of Science in the Middle School

Student Teaching
Students complete a 16 week student teaching experience. Students must pass the edTPA performance-based assessment with a minimum score of 37 during this experience.

- TEMC 4803 Student Teaching Seminar for Middle Childhood Education
- TEMC 4802 Student Teaching: Middle Childhood

ADVICEMENT
Advisement is provided by the academic advisors in the Beeghly College of Liberal Arts, Social Sciences, and Education. Majors in this program must complete general education requirements, subject area curriculum requirements, reading course requirements, and professional education requirements. Prior to student teaching, all middle childhood majors must complete a preclinical experience.

REQUIRED ASSESSMENTS
The Ohio Assessments for Educators (OAE) assesses the content area and professional (pedagogical) knowledge of candidates who are seeking initial Ohio educator license or adding a new licence area. The assessments are aligned with Ohio’s New Learning Standards. Teacher candidates must pass these exams prior to student teaching.

- 002 Assessment of Professional Knowledge (All MCE Candidates)
- 030 Middle Grades Mathematics (for those with Mathematics concentration)
- 029 Middle Grades Science (for those with Science concentration)
- 090 Foundations of Reading

ENDORSEMENTS
The following endorsements are available to individuals holding this teaching license and may increase marketability. K12 TESOL Endorsement, K12 Reading Endorsement, Middle Childhood Generalist Endorsement (enables teaching in content areas not included in current course of study).
**General Education Requirements**

- ENGL 1550 Writing 1 (requires a B average) 3-4
  - or ENGL 1549 Writing 1 with Support
- ENGL 1551 Writing 2 (requires a B average) 3
- CMST 1545 Communication Foundations 3
- MATH 2623 Quantitative Reasoning 3
  - or MATH 2652 Mathematics for Early Childhood Teachers 2
  - or MATH 2665 Foundations of Middle School Mathematics 2

(Preferred course is MATH 2652 if required to take Math Praxis Core)

(Mathematics Concentration takes MATH 2665)

Some courses are categorized in more than one knowledge domain. Courses can only be used once within the General Education model. Some majors prescribe specific GE courses. If a course has been added to the domains, it is required.

**Arts and Humanities** 6

- Natural Sciences (2 courses, 1 lab) 7
- PSYC 1560 General Psychology 3

**Social Science GER** 3

**Social and Personal Awareness** 6

**Major Requirements -Mathematics Concentration**

- TCED 1500 Introduction to Becoming a Teacher First Year Experience Course BCOE 3
- MATH 1564 Foundations of Middle School Mathematics 1 4
- MATH 2665 Foundations of Middle School Mathematics 2 4
- MATH 3767 Algebra/Geometry for Middle School Teachers 1 4
- MATH 3768 Algebra/Geometry for Middle School Teachers 2 4
- MATH 4869 Functions, Calculus, and Applications for Middle School Teachers 3
- MATH 4870 Mathematics Seminar for Middle School Teachers 3
- STAT 2601 Introductory Statistics 3

**Science Concentration**

- BIOL 1505 Biology and the Modern World 3
- CHEM 1500 Chemistry in Modern Living 3
- GEOL 1505 Physical Geology 4
  - & 150SL Physical Geology Laboratory 2
- GEOL 2605 Historical Geology 4
- PHYS 2607 Physical Science for Middle and Secondary Education 4
- ASTR 1504 Descriptive Astronomy 3
- ENST 2600 Foundations of Environmental Studies 3
- ENST 2600L Foundations of Environmental Studies Laboratory 1
- GEOG 2630 Weather 3
- TEMC 3707 Science/Technology/Society 1,2 3

**Professional Education Curriculum**

- EDFN 1501 Introduction to Education 3
- PSYC 3709 Psychology of Education 3
- SPED 2630 Individuals with Exceptionalities in Society 1,2 3
- EDFN 3708 Education and Society 3
- TEMC 3702 Teaching & Learning in Middle Schools 1,2 3

**Reading Course Requirement**

- TERG 3701 Phonics in Reading Instruction 3
- TERG 2610 Reading Application in Content Areas Middle Years 3
- TERG 3702 Developmental Reading Instruction 1 3
- TERG 3703 Assessment and Instruction in Reading 2 3

**Preclinical Curriculum**

- TEMC 4801 The Middle School Learning Community 2 3
- TEMC 4804 Middle Level Instructional Design and Student Outcomes 2 3
- TEMC 3704 Teaching Mathematics in the Middle School 2 3
- TEMC 3705 The Teaching of Science in the Middle School 2 3

**Student Teaching Curriculum**

- TEMC 4802 Student Teaching: Middle Childhood 2 10
- TEMC 4803 Student Teaching Seminar for Middle Childhood Education 2

Total Semester Hours for the Degree: 136 s.h.

**BCOE Notes:**

**Advisement:**

- It is highly recommended that all teacher candidates meet with an academic advisor every semester.
- Freshmen, athletes, and students on warning and probation are required to meet with an advisor before registration.
- At the completion of 30 SH any teacher candidate who: 1) was required to and has not passed PRAXIS Core Exam(s), or 2) holds a GPA of 2.25 or below will be referred to Central Advising for advising and career services. If at a later date the teacher candidate passes all required parts of the Praxis Core Exam and attains a GPA of 2.25 or higher that student may return to BCOE for advising.

**Important Notes:**

- Neither admission to the University nor declaration of a major related to a teaching field guarantees admission to the BCOE’s Teacher Education Programs or candidacy for a teaching license.
- Formal Admission to Teacher Education (Upper-Division) is required before teacher candidates are allowed to enroll in certain junior and senior level courses in BCOE.
- Undetermined education majors must declare a major before applying for admission to a Teacher Education Program.
- Admission to a Teacher Education Program is obtained upon satisfactory completion of the following requirements:
  
  - Minimum completion of 50 SH
  - Minimum 2.75 overall GPA
  - Meet one of the following criteria:
  - Overall GPA 3.4 or better, OR
  - ACT scores of Reading-21, English-18, Math-22, AND/OR
  - SAT scores of Reading-450, Writing-430, Math-520, AND/OR
  - Praxis CORE scores, Reading-156, Writing-162, Math-150

(Attach a copy of your CORE scores to the application)

- “B” average or better (A-C, B-B) for:
  - ENGL 1550
  - ENGL 1551

If failure to meet “B” average above must also complete:
If you receive a “C” or below you will need to retake the course.

- “B” average or better (B-B-B, A-B-C) across the following:

  - ENGL 2651 or MATH 1564 or HIST 2606/1511 or BIOL 1505

If student does not have a “B” average, student will be required to retake one or more of these courses until the “B” average is achieved.

- A grade of “C” or better is required in all required major courses. Courses taken as “CR/NC” will not count towards the major
- Professional education and block courses may only be repeated one time.
- Minimum requirements for teaching licenses are determined by the Ohio Department of Education; if those requirements change, they become effective immediately at Youngstown State University. (YSU Undergraduate Catalog).

**Upper-Division Application Process**

- Upper division application and forms must be printed from the BCOE website.
- After completing a minimum of 50 SH, submit the following:
  - Upper Division application
  - Good Moral Character Statement
  - copy of BCI & FBI clearances
  - schedule an upper division interview with the BCOE Office of Student Services, room 2101, no later than:
- Upper Division Application Deadline
  - September 1—to register for Upper Division Courses for Spring
  - February 1—to register for Upper Division courses for Summer & Fall
- Each completed application is reviewed and approved by the Upper Division Admission and Retention Committee. If all requirements are met, the teacher candidate may register for Upper Division courses for the following semester. Upper Division courses are the courses designated with the “+” symbol. Applications submitted after the deadline will not be processed until the end of the respective semester.

**Program Notes:**

- If Math concentration is chosen, Math GER is not required. If Science concentration is chosen, Natural Science GER is fulfilled through subject area curriculum. If Language Arts concentration is chosen, Arts & Humanities GER is fulfilled through subject area curriculum. If Social Studies concentration is chosen, Social Sciences GER is fulfilled through subject area curriculum.
- Candidates will not be permitted to take the following professional education courses more than twice: EDFN 1501, EDFN 3708, PSYC 3709, SPED 2630, TERG 2601, 3701, 3702, 3703, 2610, 3711, TEMC 4802, SED 4800, ECIS 2629, ECIS 3700, all preclinical experience courses, student teaching, and student teaching seminar.
- If the program is concerned regarding teacher candidate performance in the preclinical experience, as determined by CPAST criteria, the program coordinator may require the teacher candidate to complete an additional preclinical experience prior to the student teaching experience.

**Preclinical Application with Request for Graduation Evaluation**

- Preclinical application is completed on TaskStream. Directions are available on the BCOE website.
- Preclinical application and graduation evaluation request must be submitted one year prior to the intended preclinical semester no later than:
  - September 1—for Fall preclinical
  - February 1—for Spring preclinical

Preclinical candidates are screened for eligibility based on GPA and course completion.

**Student Teaching:**

- Prerequisites:
  - BCOE Upper Division and Senior status,
  - Overall 2.75 GPA
  - Minimum of 2.67 GPA in subject area curriculum and professional education courses with no grade less than a “C” (each computed individually).
  - Passage of OAE test(s) and ACTFL tests for foreign language.
- Instructions for completing the Student Teaching Application and Forms are available on BCOE website. The application and forms must be completed and printed from the BCOE website and submitted to the BCOE Office of Student Services no later than:
  - September 1—to Student Teach the following Spring Semester
  - February 1—to Student Teach the following Fall Semester

**Graduation Process:**

- Apply for graduation during the first three weeks of the semester you plan to graduate. Graduation evaluation must be completed in advance of application for graduation.

**Completing a Bachelor of Science in Education without Licensure:**

- Teacher candidates who choose to graduate without licensure must apply for approval in the BCOE Office of Student Services.
- Once approved, teacher candidates graduating without licensure must take TCED 4830 (3 SH) capstone in place of student teaching.

**Year 1**

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**Semester Hours** 18

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**Semester Hours** 19

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Learning Outcomes

The following learning outcomes are based on The Ohio Standards for the Teaching Profession. These standards were developed for use as a guide for teachers as they continually reflect upon and improve their effectiveness as educators throughout all of the stages of their careers. These standards serve as an important tool for teachers as they consider their growth and development in the profession. These standards in developing and content of our teacher education programs. They are interrelated and connect in teachers’ practice.

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- Teachers know and understand the content area for which they have instructional responsibility.
- Teachers understand and use varied assessments to inform instruction, evaluate and ensure student learning.
- Teachers plan and deliver effective instruction that advances the learning of each individual student.
- Teachers create learning environments that promote high levels of learning and achievement for all students.
- Teachers assume responsibility for professional growth, performance and involvement as an individual and as a member of a learning community.
- Teachers collaborate and communicate with students, parents, other educators, administrators and the community to support student learning. Teachers assume responsibility for professional growth, performance and involvement as an individual and as a member of a learning community.

The learning outcomes for this program, align with the 5 Standards of the Association for Middle Level Education (AMLE):

- Middle level teacher candidates understand, use, and reflect on the major concepts, principles, theories, and research related to young adolescent development and use that knowledge in their practice. They demonstrate their ability to apply this knowledge when making curricular decisions, planning and implementing instruction, participating in middle level programs and practices, and providing healthy and effective learning environments for all young adolescents.
- Middle level teacher candidates understand and use the central concepts, standards, research, and structures of content to plan and implement curriculum that develops all young adolescents’ competence in subject matter. They use their knowledge and available resources to design, implement, and evaluate challenging, developmentally responsive curriculum that results in meaningful learning outcomes. Middle level teacher candidates demonstrate their ability to assist all young adolescents in understanding the interdisciplinary nature of knowledge.
- They design and teach curriculum that is responsive to all young adolescents’ local, national, and international histories, language/dialects, and individual identities (e.g., race, ethnicity, culture, age, appearance, ability, sexual orientation, socioeconomic status, family composition).
- Middle level teacher candidates understand the major concepts, principles, theories, and research underlying the philosophical foundations of developmentally responsive middle level programs and practices, and providing healthy and effective learning environments for all young adolescents.
- Teachers plan and deliver effective instruction that advances the learning of each individual student.
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The learning outcomes for this program, align with the 5 Standards of the Association for Middle Level Education (AMLE):

- Teachers understand student learning and development and respect the diversity of the students they teach.
- Teachers know and understand the content area for which they have instructional responsibility.
- Teachers understand and use varied assessments to inform instruction, evaluate and ensure student learning.
- Teachers plan and deliver effective instruction that advances the learning of each individual student.
- Teachers create learning environments that promote high levels of learning and achievement for all students.
- Teachers assume responsibility for professional growth, performance and involvement as an individual and as a member of a learning community.
- Teachers collaborate and communicate with students, parents, other educators, administrators and the community to support student learning. Teachers assume responsibility for professional growth, performance and involvement as an individual and as a member of a learning community.

Youngstown State University Undergraduate
Bachelor of Science in Education in Middle Childhood Education (4-9), Language Arts-Science Concentration

Dr. Kathleen Cripe, Program Coordinator

OVERVIEW
In cooperation with various academic discipline departments in the University, the Department of Teacher Education and Leadership Studies offers a four-year Middle Childhood Education Program (grades 4-9), Science and Language Arts Concentration, approved by the Ohio Department of Education. The Middle Childhood Science and Language Arts License (Grades 4-9), Bachelor of Science in Education degree requires a minimum of 130 semester hours of course work. This teaching field requires passage of the Ohio Assessments for Educators in order to be eligible to student teach.

EMPLOYMENT OPPORTUNITIES
Graduates of the Middle Childhood Program will be qualified to teach in the grades 4-9 classroom. Additional opportunities may be available in the private sector to tutor students. It is recommended that students in this major consider adding the Middle Childhood Generalist Endorsement to increase marketability.

Professional Dispositions:
In addition to the above learning outcomes, teacher candidates are expected to display the following professional dispositions:

- Creating fairness in the classroom
- Providing an inclusive environment that is safe and conducive to learning
- Demonstrating the belief that all students can learn
- Fostering collaborative relationships to support student learning and wellbeing
- Exhibiting professional skills

FIELD EXPERIENCES AND STUDENT TEACHING
Students complete a number of field experiences to support the learning of content and best practices of teaching. Field experiences offer opportunities to provide varying levels of classroom support (observing, one-on-one tutoring, small group teaching, co-teaching, whole class teaching).

Preclinical Field Experiences

The preclinical experience is conducted in local schools and provides an opportunity for teacher candidates to complete an in-depth field experience prior to student teaching. This field experience requires a substantial time commitment, as teacher candidates spend the entire day in schools during designated weeks. The Middle Childhood preclinical experience is scheduled during the fall semester. Applications for the preclinical experience must be submitted to the Office of Student Field Experience one year in advance (September 1).

- T EMC 3702 Teaching & Learning in Middle Schools
- T EMC 4801 The Middle School Learning Community
- T EMC 3705 The Teaching of Science in the Middle School

Student Teaching
Students complete a 16 week student teaching experience. Students must pass the edTPA performance-based assessment with a minimum score of 37 during this experience.

- T EMC 4803 Student Teaching Seminar for Middle Childhood Education
- T EMC 4802 Student Teaching: Middle Childhood

ADVISEMENT
Advisement is provided by the academic advisors in the Beeghly College of Liberal Arts, Social Sciences, and Education. Majors in this program must complete general education requirements, subject area curriculum requirements, reading course requirements, and professional education requirements. Prior to student teaching, all middle childhood majors must complete a preclinical experience.

REQUIRED ASSESSMENTS
The Ohio Assessments for Educators (OAE) assesses the content area and professional (pedagogical) knowledge of candidates who are seeking initial Ohio educator license or adding a new licence area. The assessments are aligned with Ohio’s New Learning Standards. Teacher candidates must pass these exams prior to student teaching.

002 Assessment of Professional Knowledge (All MCE Candidates)
028 Middle Grades English Language Arts (for those with English Language Arts concentration)
029 Middle Grades Science (for those with Science concentration)
090 Foundations of Reading

ENDORSEMENTS
The following endorsements are available to individuals holding this teaching license and may increase marketability: K-12 TESOL Endorsement, K-12 Reading Endorsement, Middle Childhood Generalist Endorsement (enables teaching in content areas not included in current course of study).

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<td>or SS 1500</td>
<td>Strong Start Success Seminar</td>
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<tr>
<td>or HONR 1500</td>
<td>Intro to Honors</td>
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General Education Requirements

- ENGL 1550   Writing (requires a B average)
- or ENGL 1545 Writing 1 with Support
- ENGL 1551   Writing 2 (requires a B average)
- CMST 1545   Communication Foundations

Mathematics Requirement

One of the following courses may be taken to fulfill Math Ger. Math 2652 is preferred math course if you are required to take Math Praxis Core.

- MATH 2623   Quantitative Reasoning
- OR:         
- MATH 2652   Mathematics for Early Childhood Teachers 2
- OR:         
- MATH 2665   Foundations of Middle School Mathematics 2 (Mathematics Concentration takes this one)
Some courses are categorized in more than one knowledge domain. Courses can only be used once within the General Education model. Courses listed for GER’s below are required in this program. See page 2 for other General Education recommendations.

Arts and Humanities 6
Natural Sciences (2 courses, 1 lab) 7
Social Science 6
  PSYC 1560 General Psychology
Social Science GER
Social and Personal Awareness 6

**Major Requirements**

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<td>PSYC 3709</td>
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<tr>
<td>SPED 2630</td>
<td>Individuals with Exceptionalities in Society 1</td>
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<tr>
<td>EDFN 3708</td>
<td>Education and Society</td>
<td>3</td>
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<tr>
<td>TEMC 3702</td>
<td>Teaching &amp; Learning in Middle Schools 1,2</td>
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**Language Arts Concentration**

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<tr>
<td>CMST 2656</td>
<td>Interpersonal Communication</td>
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<tr>
<td>ENGL 2610</td>
<td>World Literature (AH/SPA)</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 2618</td>
<td>American Literature and Diversity (AH/SPA)</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 2651</td>
<td>Introduction to Language (SS/SPA)</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 3700</td>
<td>Literary Study</td>
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</tr>
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<td>ENGL 3704</td>
<td>Literature for Middle School Readers</td>
<td>3</td>
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<tr>
<td>ENGL 3730</td>
<td>Teaching Language Arts</td>
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<tr>
<td>ENGL 3739</td>
<td>Writing for Middle School Teachers</td>
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**Science Concentration**

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<tbody>
<tr>
<td>BIOL 1505</td>
<td>Biology and the Modern World (NS)</td>
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<td>CHEM 1500</td>
<td>Chemistry in Modern Living (NS)</td>
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<td>GEOL 1505</td>
<td>Physical Geology &amp; 1505L and Physical Geology Laboratory (NS)</td>
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<td>GEOL 2605</td>
<td>Historical Geology</td>
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<tr>
<td>PHYS 2607</td>
<td>Physical Science for Middle and Secondary Education (NS)</td>
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<td>ASTR 1504</td>
<td>Descriptive Astronomy (NS)</td>
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<td>Foundations of Environmental Studies</td>
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<td>ENST 2600L</td>
<td>Foundations of Environmental Studies Laboratory</td>
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<td>GEOG 2630</td>
<td>Weather</td>
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<tr>
<td>TEMC 3707</td>
<td>Science/Technology/Society (upper division status - for science concentration area candidates only) 1,2</td>
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**Professional Education Curriculum**

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<td>PSYC 3709</td>
<td>Psychology of Education</td>
<td>3</td>
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<tr>
<td>SPED 2630</td>
<td>Individuals with Exceptionalities in Society 1</td>
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<td>EDFN 3708</td>
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**Reading Course Requirements**

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<tr>
<td>TERR 3701</td>
<td>Phonics in Reading Instruction</td>
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<td>TERR 2610</td>
<td>Reading Application in Content Areas Middle Years</td>
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</tr>
<tr>
<td>TERR 3702</td>
<td>Developmental Reading Instruction 1</td>
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<tr>
<td>TERR 3703</td>
<td>Assessment and Instruction in Reading 2</td>
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**Preclinical Curriculum**

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<tr>
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<tr>
<td>TEMC 4801</td>
<td>The Middle School Learning Community 2</td>
<td>3</td>
</tr>
<tr>
<td>TEMC 4804</td>
<td>Middle Level Instructional Design and Student Outcomes 2</td>
<td>3</td>
</tr>
<tr>
<td>TEMC 3705</td>
<td>The Teaching of Science in the Middle School 2</td>
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</tr>
<tr>
<td>TEMC 3706</td>
<td>Teaching Language Arts in the Middle School 2</td>
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**Student Teaching Curriculum**

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<tr>
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<tbody>
<tr>
<td>TEMC 4802</td>
<td>Student Teaching: Middle Childhood 2</td>
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</table>

TEMC 4803 Student Teaching Seminar for Middle Childhood Education 2

Total Hours Required for the Degree: 130 s.h.

1 Prequisites for preclinical curriculum.
2 Upper division course.

**BCOE Notes:**

**Advisement:**

- It is highly recommended that all teacher candidates meet with an academic advisor every semester.
- Freshmen, athletes, and students on warning and probation are required to meet with an advisor before registration.
- At the completion of 30 SH any teacher candidate who: 1) was required to and has not passed PRAXIS Core Exam(s), or 2) holds a GPA of 2.25 or below will be referred to Central Advising for advising and career services. If at a later date the teacher candidate passes all required parts of the Praxis Core Exam and attains a GPA of 2.25 or higher that student may return to BCOE for advising.

**Important Notes:**

- Neither admission to the University nor declaration of a major related to a teaching field guarantees admission to the BCOE’s Teacher Education Programs or candidacy for a teaching license.
- Formal Admission to Teacher Education (Upper-Division) is required before teacher candidates are allowed to enroll in certain junior and senior level courses in BCOE.
- Undetermined education majors must declare a major before applying for admission to a Teacher Education Program.
- Admission to a Teacher Education Program is obtained upon satisfactory completion of the following requirements:
  - Minimum completion of 50 SH
  - Minimum 2.75 overall GPA
  - Meet one of the following criteria:
    - Overall GPA 3.4 or better, OR
    - ACT scores of Reading-21, English-18, Math-22, AND/OR
    - SAT scores of Reading-450, Writing-430, Math-520, AND/OR
    - Praxis CORE scores, Reading-156, Writing-162, Math-150

(Attach a copy of your CORE scores to the application)

If failure to meet “B” average above must also complete:

- ENGL 2601 grade of “B” or better. If you receive a “C” or below you will need to retake the course.
- “B” average or better (B-B-B, A-B-C) across the following:
  - ENGL 1550, ENGL 1551

If student does not have a “B” average, student will be required to retake one or more of these courses until the “B” average is achieved.
A grade of “C” or better is required in all required major courses. Courses taken as “CR/NC” will not count towards the major.
- Professional education and block courses may only be repeated one time.
- Minimum requirements for teaching licenses are determined by the Ohio Department of Education; if those requirements change, they become effective immediately at Youngstown State University (YSU Undergraduate Catalog).

**Upper-Division Application Process**
- Upper division application and forms must be printed from the BCOE website.
- After completing a minimum of 50 SH, submit the following:
  - Upper Division application
  - Good Moral Character Statement
  - copy of BCI & FBI clearances
  - schedule an upper division interview with the BCOE Office of Student Services, room 2101, no later than:
- Upper Division Application Deadline
  - September 1—to register for Upper Division Courses for Spring
  - February 1—to register for Upper Division courses for Summer & Fall
- Each completed application is reviewed and approved by the Upper Division Admission and Retention Committee. If all requirements are met, the teacher candidate may register for Upper Division courses for the following semester. Upper Division courses are the courses designated with the “+” symbol. Applications submitted after the deadline will not be processed until the end of the respective semester.

**Program Notes:**
- If Math concentration is chosen, Math GER is not required. If Science concentration is chosen, Natural Science GER is fulfilled through subject area curriculum. If Language Arts concentration is chosen, Arts & Humanities GER is fulfilled through subject area curriculum. If Social Studies concentration is chosen, Social Sciences GER is fulfilled through subject area curriculum.
- Candidates will not be permitted to take the following professional education courses more than twice: EDFN 1501, EDFN 3708, PSYC 3709, SPED 2630, TERG 2601, 3701, 3702, 3703, 2610, 3711, TEMC 4802, SED 4800, ECIS 2629, ECIS 3700, all preclinical experience courses, student teaching, and student teaching seminar.
- If the program is concerned regarding teacher candidate performance in the preclinical experience, as determined by CPAST criteria, the program coordinator may require the teacher candidate to complete an additional preclinical experience prior to the student teaching experience.

**Preclinical Application with Request for Graduation Evaluation**
- Preclinical application is completed on TaskStream. Directions are available on the BCOE website.
- Preclinical application and graduation evaluation request must be submitted one year prior to the intended preclinical semester no later than:
  - September 1—for Fall preclinical
  - February 1—for Spring preclinical
- Preclinical candidates are screened for eligibility based on GPA and course completion.

**Student Teaching:**
- Prerequisites:
  - BCOE Upper Division and Senior status,
  - Overall 2.75 GPA
- Minimum of 2.67 GPA in subject area curriculum and professional education courses with no grade less than a “C” (each computed individually).
- Passage of OAE test(s) and ACTFL tests for foreign language.
- Instructions for completing the Student Teaching Application and Forms are available on BCOE website. The application and forms must be completed and printed from the BCOE website and submitted to the BCOE Office of Student Services no later than:
  - September 1—to Student Teach the following Spring Semester
  - February 1—to Student Teach the following Fall Semester

**Graduation Process:**
- Apply for graduation during the first three weeks of the semester you plan to graduate. Graduation evaluation must be completed in advance of application for graduation.

**Completing a Bachelor of Science in Education without Licensure:**
- Teacher candidates who choose to graduate without licensure must apply for approval in the BCOE Office of Student Services.
- Once approved, teacher candidates graduating without licensure must take TCED 4830 (3 SH) capstone in place of student teaching.

**Year 1**

<table>
<thead>
<tr>
<th>Semester</th>
<th>Fall</th>
<th>S.H.</th>
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<tbody>
<tr>
<td>YSU 1500</td>
<td>Success Seminar</td>
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<tr>
<td>ENGL 1550</td>
<td>Writing 1</td>
<td>3</td>
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<td>ENGL 2618</td>
<td>American Literature and Diversity (counts as AH or SPA Elective)</td>
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<tr>
<td>PSYC 1560</td>
<td>General Psychology</td>
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<td>GEOL 1505</td>
<td>Physical Geology</td>
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<td>&amp; 1505L</td>
<td>and Physical Geology Laboratory</td>
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<td>Introduction to Becoming a Teacher First Year Experience Course BCOE</td>
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<tbody>
<tr>
<td>ENGL 1551</td>
<td>Writing 2</td>
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<tr>
<td>ENGL 2610</td>
<td>World Literature (counts as AH or SPA Elective)</td>
</tr>
<tr>
<td>EDFN 1501</td>
<td>Introduction to Education</td>
</tr>
<tr>
<td>ENST 2600</td>
<td>Foundations of Environmental Studies</td>
</tr>
<tr>
<td>&amp; 2600L</td>
<td>and Foundations of Environmental Studies Laboratory</td>
</tr>
<tr>
<td>MATH 2623</td>
<td>Quantitative Reasoning</td>
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<th>Year 2</th>
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<tr>
<td>Fall</td>
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<tr>
<td>ENGL 2651</td>
<td>Introduction to Language</td>
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<tr>
<td>SPED 2630</td>
<td>Individuals with Exceptionalities in Society</td>
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<tr>
<td>CMST 1545</td>
<td>Communication Foundations</td>
</tr>
<tr>
<td>CHEM 1500</td>
<td>Chemistry in Modern Living</td>
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<td>TERG 2610</td>
<td>Reading Application in Content Areas Middle Years</td>
</tr>
<tr>
<td>Social Science GER</td>
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<td></td>
<td>Semester Hours</td>
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<table>
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<td>TERG 3701</td>
<td>Phonics in Reading Instruction</td>
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<td>ASTR 1504</td>
<td>Descriptive Astronomy</td>
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<tr>
<td>PHYS 2607</td>
<td>Physical Science for Middle and Secondary Education</td>
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</table>
Learning Outcomes

The following learning outcomes are based on The Ohio Standards for the Teaching Profession. These standards were developed for use as a guide for teachers as they continually reflect upon and improve their effectiveness as educators throughout all of the stages of their careers. These standards serve as an important tool for teachers as they consider their growth and development in the profession. These standards in developing and content of our teacher education programs. They are interrelated and connect in teachers’ practice.

- Teachers understand student learning and development and respect the diversity of the students they teach.
- Teachers know and understand the content area for which they have instructional responsibility.
- Teachers understand and use varied assessments to inform instruction, evaluate and ensure student learning.
- Teachers plan and deliver effective instruction that advances the learning of each individual student.
- Teachers create learning environments that promote high levels of learning and achievement for all students.
- Teachers assume responsibility for professional growth, performance and involvement as an individual and as a member of a learning community.
- Teachers collaborate and communicate with students, parents, other educators, administrators and the community to support student learning.

The learning outcomes for this program, align with the 5 Standards of the Association for Middle Level Education (AMLE):

- Middle level teacher candidates understand, use, and reflect on the major concepts, principles, theories, and research related to young adolescent development and use that knowledge in their practice. They demonstrate their ability to apply this knowledge when making curricular decisions, planning and implementing instruction, participating in middle level programs and practices, and providing healthy and effective learning environments for all young adolescents.
- Middle level teacher candidates understand and use the central concepts, standards, research, and structures of content to plan and implement curriculum that develops all young adolescents’ competence in subject matter. They use their knowledge and available resources to design, implement, and evaluate challenging, developmentally responsive curriculum that results in meaningful learning outcomes. Middle level teacher candidates demonstrate their ability to assist all young adolescents in understanding the interdisciplinary nature of knowledge. They design and teach curriculum that is responsive to all young adolescents’ local, national, and international histories, language/dialects, and individual identities (e.g., race, ethnicity, culture, age, appearance, ability, sexual orientation, socioeconomic status, family composition).
- Middle level teacher candidates understand the major concepts, principles, theories, and research underlying the philosophical foundations of developmentally responsive middle level programs and schools, and they work successfully within middle level organizational components.
- Middle level teacher candidates understand, use, and reflect on the major concepts, principles, theories, and research related to data-informed instruction and assessment. They employ a variety of developmentally appropriate instructional strategies, information literacy skills, and technologies to meet the learning needs of all young adolescents (e.g., race, ethnicity, culture, age, appearance, ability, sexual orientation, socioeconomic status, family composition).
- Middle level teacher candidates understand their complex roles as teachers of young adolescents. They engage in practices and behaviors that develop their competence as middle level professionals. They are informed advocates for young adolescents and middle level education, and work successfully with colleagues, families, community agencies, and community members. Middle level teacher candidates demonstrate positive dispositions and engage in ethical professional behaviors.

Bachelor of Science in Education in Middle Childhood Education (4-9), Language Arts-Social Studies Concentration

Dr. Kathleen Cripe, Program Coordinator

OVERVIEW

- In cooperation with various academic discipline departments in the University, the Department of Teacher Education and Leadership Studies offers a four-year Middle Childhood Education Program (grades 4-9), Social Studies and Language Arts Concentration, approved by the Ohio Department of Education. The Middle Childhood Social Studies and Language Arts License (Grades 4-9), Bachelor of Science in Education degree requires a minimum of 134 semester hours of course work. This teaching field also requires passage of the Ohio Assessments for Educators in order to be eligible to student teach.
EMPLOYMENT OPPORTUNITIES

- Graduates of the Middle Childhood Program will be qualified to teach in the grades 4-9 classroom. Additional opportunities may be available in the private sector to tutor students. It is recommended that students in this major consider adding the Middle Childhood Generalist Endorsement to increase marketability.

Professional Dispositions:

- In addition to the above learning outcomes, teacher candidates are expected to display the following professional dispositions:
- Creating fairness in the classroom
- Providing an inclusive environment that is safe and conducive to learning
- Demonstrating the belief that all students can learn
- Fostering collaborative relationships to support student learning and well-being
- Exhibiting professional skills

FIELD EXPERIENCES AND STUDENT TEACHING

- Students complete over 150 hours of preclinical experiences, and additional field experiences, which are included in the following courses and offer opportunities to provide varying levels of classroom support (observing, one-on-one tutoring, small group teaching, co-teaching, whole class teaching).

Field Experiences

- EDFN 1501 Introduction to Education
- EDFN 3708 Education and Society
- SPED 2630 Individuals with Exceptionalities in Society
- TERG 3701 Phonics in Reading Instruction
- TERG 3702 Developmental Reading Instruction
- TERG 3703 Assessment and Instruction in Reading
- TERG 2610 Reading Application in Content Areas Middle Years

Preclinical Field Experiences

- The preclinical experience is conducted in local schools and provides an opportunity for teacher candidates to complete an in-depth field experience prior to student teaching. This field experience requires a substantial time commitment, as teacher candidates spend the entire day in schools during designated weeks. The Middle Childhood preclinical experience is scheduled during the fall semester. Applications for the preclinical experience must be submitted (1) one year in advance to BCOE Room 2101, by September 1 for the preclinical experience. Contact the Beeghly College of Education, academic advisors for minimum preclinical prerequisites.
- TECM 3702 Teaching & Learning in Middle Schools
- TECM 4801 The Middle School Learning Community
- TECM 3703 Thematic Instruction and Assessment Methods in Social Studies
- TECM 3706 Teaching Language Arts in the Middle School

Student Teaching

Students complete a 16 week student teaching experience. Students must pass the edTPA performance-based assessment with a minimum score of 37 during this experience.

- TECM 4803 Student Teaching Seminar for Middle Childhood Education
- TECM 4802 Student Teaching: Middle Childhood

ADVICEMENT

Advisement is provided by the academic advisors in the Beeghly College of Liberal Arts, Social Sciences, and Education. Majors in this program must complete general education requirements, subject area curriculum requirements, reading course requirements, and professional education requirements. Prior to student teaching, all adolescent/young adult majors must complete a preclinical experience.

REQUIRED ASSESSMENTS

The Ohio Assessments for Educators (OAE) assess the content area and professional (pedagogical) knowledge of candidates who are seeking initial Ohio educator license or adding a new licence area. The assessments are aligned with Ohio’s New Learning Standards. Teacher candidates must pass these exams prior to student teaching.

- 002 Assessment of Professional Knowledge (All MCE Candidates)
- 028 Middle Grades English Language Arts (for those with English Language Arts concentration)
- 031 Middle Grades Social Studies (for those with Social Studies concentration)
- 090 Foundations of Reading

ENDORSEMENTS

The following endorsements are available to individuals holding this teaching license and may increase marketability: K12 TESOL Endorsement, K12 Reading Endorsement, Middle Childhood Generalist Endorsement (enables teaching in content areas not included in current course of study).

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<tr>
<th>COURSE</th>
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<td>YSU 1500</td>
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<tr>
<td>or SS 1500</td>
<td>Strong Start Success Seminar</td>
<td></td>
</tr>
<tr>
<td>or HONR 1500</td>
<td>Intro to Honors</td>
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</tbody>
</table>

General Education Requirements

| ENGL 1550 | Writing 1 (requires a B average) | 3-4 |
| or ENGL 1549 | Writing 1 with Support | |
| ENGL 1551 | Writing 2 (requires a B average) | 3 |
| CMST 1545 | Communication Foundations | 3 |
| Mathematics Requirement | | 3 |

One of the following courses may be taken to fulfill Math Ger. Math 2652 is preferred math course if you are required to take Math Praxis Core.

| MATH 2623 | Quantitative Reasoning | |
| OR: | | |
| MATH 2652 | Mathematics for Early Childhood Teachers 2 | |
| OR: | | |
| MATH 2665 | Foundations of Middle School Mathematics 2 | |

Some courses are categorized in more than one knowledge domain. Courses can only be used once within the General Education model. Courses listed for Knowledge Domains below are required in this program. See page 2 for other General education recommendations.

Arts and Humanities (6 s.h.)

- The required 6 s.h. are met with courses in the major.

| Natural Sciences (2 courses, 1 with lab) (7 s.h.) | 7 |
| Social Science (6 s.h.) | |
| PSYC 1560 | General Psychology | 3 |
| Remaining 3 s.h. are met with courses in the major. | |
| Social and Personal Awareness (6 s.h.) | |
| The required 6 s.h. are met with courses in the major. | |

Major Requirements Language Arts Concentration

| TCED 1500 | Introduction to Becoming a Teacher First Year Experience Course BCOE | 3 |
| CMST 2656 | Interpersonal Communication | 3 |
Total Hours Required for the Degree: 134 s.h.

**Student Teaching Curriculum**
- TEMC 4803
- TEMC 4801
- TEMC 3709

**Preclinical Curriculum**
- TEMC 3702
- EDFN 3708
- SPED 2630

**Reading Course Requirements**
- TERG 3701
- TERG 3702
- TERG 3703

**Professional Education Curriculum**
- ANTH 1500
- PSYC 3709
- EDFN 1501

**Social Studies Concentration**
- ENGL 2618
- ENGL 2651
- ENGL 3700

**Upper Division Application Process**
- Upper division application and forms must be printed from the BCOE website.
- After completing a minimum of 50 SH, submit the following:
  - Upper Division application
  - Good Moral Character Statement
  - copy of BCI & FBI clearances
  - schedule an upper division interview with the BCOE Office of Student Services, room 2101, no later than:
- Upper Division Application Deadline

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  - Meet one of the following criteria:
    - Overall GPA 3.4 or better, OR
    - ACT scores of Reading-21, English-18, Math-22, AND/OR
    - SAT scores of Reading-450, Writing-430, Math-520, AND/OR
    - Praxis CORE scores, Reading-156, Writing-162, Math-150

(Attach a copy of your CORE scores to the application)

- "B" average or better (A-C, B-B-B, A-B-C) across the following:
  - ENGL 1550, ENGL 1551
  - ENGL 2601 grade of "B" or better.
  - If failure to meet “B” average above must also complete:
    - ENGL 2601 grade of “B” or better. If you receive a “C” or below you will need to retake the course.
  - "B" average or better (B-B-B, A-B-C) across the following:
    - EDFN 1501, CMST 1545
    - SPED 2630, ENGL 2651 or MATH 1564 or HIST 2606/1511 or BIOL 1505

If student does not have a "B" average, student will be required to retake one or more of these courses until the "B" average is achieved.

- A grade of "C" or better is required in all required major courses. Courses taken as "CR/NC" will not count towards the major
- Professional education block courses may only be repeated one time.
- Minimum requirements for teaching licenses are determined by the Ohio Department of Education; if those requirements change, they become effective immediately at Youngstown State University (YSU Undergraduate Catalog).
Completing a Bachelor of Science in Education without Licensure:

- **September 1**—to register for Upper Division Courses for Spring
- **February 1**—to register for Upper Division courses for Summer & Fall
- Each completed application is reviewed and approved by the Upper Division Admission and Retention Committee. If all requirements are met, the teacher candidate may register for Upper Division courses for the following semester. Upper Division courses are the courses designated with the “+” symbol. Applications submitted after the deadline will not be processed until the end of the respective semester.

**Program Notes:**

- If Math concentration is chosen, Math GER is not required. If Science concentration is chosen, Natural Science GER is fulfilled through subject area curriculum. If Language Arts concentration is chosen, Arts & Humanities GER is fulfilled through subject area curriculum. If Social Studies concentration is chosen, Social Sciences GER is fulfilled through subject area curriculum.
- Candidates will not be permitted to take the following professional education courses more than twice: EDFN 1501, EDFN 3708, PSYC 3709, SPED 2630, TERG 2601, 3701, 3702, 3703, 2610, 3711, TEMC 4802, SED 4800, ECIS 2629, ECIS 3700, all preclinical experience courses, student teaching, and student teaching seminar.
- If the program is concerned regarding teacher candidate performance in the preclinical experience, as determined by CPAST criteria, the program coordinator may require the teacher candidate to complete an additional preclinical experience prior to the student teaching experience.

**Preclinical Application with Request for Graduation Evaluation**

- Preclinical application is completed on TaskStream. Directions are available on the BCOE website.
- Preclinical application and graduation evaluation request must be submitted one year prior to the intended preclinical semester no later than:
  - **September 1**—for Fall preclinical
  - **February 1**—for Spring preclinical
- Preclinical candidates are screened for eligibility based on GPA and course completion.

**Student Teaching:**

- Prerequisites:
  - BCOE Upper Division and Senior status,
  - Overall 2.75 GPA
  - Minimum of 2.67 GPA in subject area curriculum and professional education courses with no grade less than a “C” (each computed individually),
  - Passage of OAE test(s) and ACTFL tests for foreign language.
- Instructions for completing the Student Teaching Application and Forms are available on BCOE website. The application and forms must be completed and printed from the BCOE website and submitted to the BCOE Office of Student Services no later than:
  - **September 1**—to Student Teach the following Spring Semester
  - **February 1**—to Student Teach the following Fall Semester

**Graduation Process:**

- Apply for graduation during the first three weeks of the semester you plan to graduate. Graduation evaluation must be completed in advance of application for graduation.

**Completing a Bachelor of Science in Education without Licensure:**

- Teacher candidates who choose to graduate without licensure must apply for approval in the BCOE Office of Student Services.
- Once approved, teacher candidates graduating without licensure must take TCED 4830 (3 SH) capstone in place of student teaching.

**Program Notes:**

- If Math concentration is chosen, Math GER is not required. If Science concentration is chosen, Natural Science GER is fulfilled through subject area curriculum. If Language Arts concentration is chosen, Arts & Humanities GER is fulfilled through subject area curriculum. If Social Studies concentration is chosen, Social Sciences GER is fulfilled through subject area curriculum.
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  - **September 1**—for Fall preclinical
  - **February 1**—for Spring preclinical
- Preclinical candidates are screened for eligibility based on GPA and course completion.

**Student Teaching:**

- Prerequisites:
  - BCOE Upper Division and Senior status,
  - Overall 2.75 GPA
  - Minimum of 2.67 GPA in subject area curriculum and professional education courses with no grade less than a “C” (each computed individually),
  - Passage of OAE test(s) and ACTFL tests for foreign language.
- Instructions for completing the Student Teaching Application and Forms are available on BCOE website. The application and forms must be completed and printed from the BCOE website and submitted to the BCOE Office of Student Services no later than:
  - **September 1**—to Student Teach the following Spring Semester
  - **February 1**—to Student Teach the following Fall Semester

**Graduation Process:**

- Apply for graduation during the first three weeks of the semester you plan to graduate. Graduation evaluation must be completed in advance of application for graduation.

**Completing a Bachelor of Science in Education without Licensure:**

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<table>
<thead>
<tr>
<th>Year 1</th>
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<td>Success Seminar</td>
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<tr>
<td></td>
<td>ENGL 1550</td>
<td>Writing 1</td>
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<td>or ENGL 1549</td>
<td>or Writing 1 with Support</td>
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<td></td>
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<td></td>
<td>POL 1560</td>
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<td>EDFN 1501</td>
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<td>Natural Science/Lab GER</td>
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**Semester Hours** | **20-21** |

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<td>PSYC 1560</td>
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<tr>
<td></td>
<td>HIST 1511</td>
<td>World Civilization from 1500</td>
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<td></td>
<td>MATH 2623</td>
<td>Quantitative Reasoning</td>
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**Semester Hours** | **18** |

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<td>HIST 2606</td>
<td>Turning Points in United States History 2</td>
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<td>PSYC 3709</td>
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<td>TERG 3702</td>
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<td>3</td>
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<td></td>
<td>Natural Science GER</td>
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**Semester Hours** | **18** |

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<th>Year 4</th>
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<td>Teaching Language Arts</td>
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<td>GEOG 3717</td>
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<tr>
<td></td>
<td>TEMC 3702</td>
<td>Teaching &amp; Learning in Middle Schools</td>
<td>3</td>
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</table>
Learning Outcomes

The following learning outcomes are based on The Ohio Standards for the Teaching Profession. These standards were developed for use as a guide for teachers as they continually reflect upon and improve their effectiveness as educators throughout all of the stages of their careers. These standards serve as an important tool for teachers as they consider their growth and development in the profession. These standards in developing and content of our teacher education programs. They are interrelated and connect in teachers’ practice.

- Teachers understand student learning and development and respect the diversity of the students they teach.
- Teachers know and understand the content area for which they have instructional responsibility.
- Teachers understand and use varied assessments to inform instruction, evaluate and ensure student learning.
- Teachers plan and deliver effective instruction that advances the learning of each individual student.
- Teachers create learning environments that promote high levels of learning and achievement for all students.
- Teachers assume responsibility for professional growth, performance and involvement as an individual and as a member of a learning community.
- Teachers collaborate and communicate with students, parents, other educators, administrators and the community to support student learning. Teachers assume responsibility for professional growth, performance and involvement as an individual and as a member of a learning community.

The learning outcomes for this program, align with the 5 Standards of the Association for Middle Level Education (AMLE):

- Middle level teacher candidates understand, use, and reflect on the major concepts, principles, theories, and research related to young adolescent development and use that knowledge in their practice. They demonstrate their ability to apply this knowledge when making curricular decisions, planning and implementing instruction, participating in middle level programs and practices, and providing healthy and effective learning environments for all young adolescents.
- Middle level teacher candidates understand and use the central concepts, standards, research, and structures of content to plan and implement curriculum that develops all young adolescents’ competence in subject matter. They use their knowledge and available resources to design, implement, and evaluate challenging, developmentally responsive curriculum that results in meaningful learning outcomes. Middle level teacher candidates demonstrate their ability to assist all young adolescents in understanding the interdisciplinary nature of knowledge. They design and teach curriculum that is responsive to all young adolescents’ local, national, and international histories, language/dialects, and individual identities (e.g., race, ethnicity, culture, age, appearance, ability, sexual orientation, socioeconomic status, family composition).
- Middle level teacher candidates understand the major concepts, principles, theories, and research underlying the philosophical foundations of developmentally responsive middle level programs and schools, and they work successfully within middle level organizational components.
- Middle level teacher candidates understand, use, and reflect on the major concepts, principles, theories, and research related to data-informed instruction and assessment. They employ a variety of developmentally appropriate instructional strategies, information literacy skills, and technologies to meet the learning needs of all young adolescents (e.g., race, ethnicity, culture, age, appearance, ability, sexual orientation, socioeconomic status, family composition).
- Middle level teacher candidates understand their complex roles as teachers of young adolescents. They engage in practices and behaviors that develop their competence as middle level professionals. They are informed advocates for young adolescents and middle level education, and work successfully with colleagues, families, community agencies, and community members. Middle level teacher candidates demonstrate positive dispositions and engage in ethical professional behaviors.

Bachelor of Science in Education in Middle Childhood Education (4-9), Science-Social Studies Concentration

Dr. Kathleen Cripe, Program Coordinator

OVERVIEW

In cooperation with various academic discipline departments in the University, the Department of Teacher Education and Leadership Studies offers a four-year Middle Childhood Education Program (grades 4-9), Science and Social Studies Concentration, approved by the Ohio Department of Education. The Middle Childhood Science and Social Studies License (Grades 4-9), Bachelor of Science in Education degree requires a minimum of 140 semester hours of course work. This teaching field also requires passage of the Ohio Assessments for Educators in order to be eligible to student teach.

EMPLOYMENT OPPORTUNITIES

Graduates of the Middle Childhood Program will be qualified to teach in the grades 4-9 classroom. Additional opportunities may be available in the private sector to tutor students. It is recommended that students in this major consider adding the Middle Childhood Generalist Endorsement to increase marketability.

Professional Dispositions:

In addition to the above learning outcomes, teacher candidates are expected to display the following professional dispositions:

- Creating fairness in the classroom
- Providing an inclusive environment that is safe and conducive to learning
- Demonstrating the belief that all students can learn
- Fostering collaborative relationships to support student learning and well-being
- Exhibiting professional skills
FIELD EXPERIENCES AND STUDENT TEACHING

Students complete over 150 hours of preclinical experiences, and additional field hours, included in the following courses, which offer opportunities to provide varying levels of classroom support (observing, one-on-one tutoring, small group teaching, co-teaching, whole class teaching).

Field Experiences

- EDFN 1501 Introduction to Education
- EDFN 3708 Education and Society
- SPED 2630 Individuals with Exceptionalities in Society
- TERG 3701 Phonics in Reading Instruction
- TERG 3702 Developmental Reading Instruction
- TERG 3703 Assessment and Instruction in Reading
- TERG 2610 Reading Application in Content Areas Middle Years

Preclinical Field Experiences:

The preclinical experience is conducted in local schools and provides an opportunity for teacher candidates to complete an in-depth field experience prior to student teaching. This field experience requires a substantial time commitment, as teacher candidates spend the entire day in schools during designated weeks. The Middle Childhood preclinical experience is scheduled during the fall semester. Applications for the preclinical experience must be submitted by September 1 for the preclinical experience. Contact the Beeghly College of Education, academic advisors for minimum preclinical prerequisites.

- TECM 3702 Teaching & Learning in Middle Schools
- TECM 4801 The Middle School Learning Community
- TECM 3703 Thematic Instruction and Assessment Methods in Social Studies
- TECM 3705 The Teaching of Science in the Middle School

Student Teaching

Students complete a 16-week student teaching experience. Students must pass the EdTPA performance-based assessment with a minimum score of 37 during this experience.

- TECM 4803 Student Teaching Seminar for Middle Childhood Education
- TECM 4802 Student Teaching; Middle Childhood

ADVISEMENT

Advise for education is provided by the academic advisors in the Beeghly College of Liberal Arts, Social Sciences, and Education. Majors in this program must complete general education requirements, subject area curriculum requirements, reading course requirements, and professional education requirements. Prior to student teaching, all adolescent/young adult majors must complete a preclinical experience.

REQUIRED ASSESSMENTS

The Ohio Assessments for Educators (OAE) assess the content area and professional (pedagogical) knowledge of candidates who are seeking initial Ohio educator license or adding a new license area. The assessments are aligned with Ohio's New Learning Standards. Teacher candidates must pass these exams prior to student teaching.

002 Assessment of Professional Knowledge (All MCE Candidates)
029 Middle Grades Science (for those with Science concentration)
031 Middle Grades Social Studies (for those with Social Studies concentration)
090 Foundations of Reading

ENDORSEMENTS

The following endorsements are available to individuals holding this teaching license and may increase marketability: K-12 TESOL Endorsement, K-12 Reading Endorsement, Middle Childhood Generalist Endorsement (enables teaching in content areas not included in current course of study).

<table>
<thead>
<tr>
<th>COURSE</th>
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<th>S.H.</th>
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<tr>
<td>YSU 1500</td>
<td>Success Seminar</td>
<td>1-2</td>
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<tr>
<td>or SS 1500</td>
<td>Strong Start Success Seminar</td>
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<tr>
<td>or HONR 1500</td>
<td>Intro to Honors</td>
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General Education Requirements

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<tr>
<td>ENGL 1550</td>
<td>Writing 1 (requires a B average)</td>
<td>3-4</td>
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<td>or ENGL 1549</td>
<td>Writing 1 with Support</td>
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<tr>
<td>ENGL 1551</td>
<td>Writing 2 (requires a B average)</td>
<td>3</td>
</tr>
<tr>
<td>CMST 1545</td>
<td>Communication Foundations</td>
<td>3</td>
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<tr>
<td>Mathematics Requirement</td>
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</tbody>
</table>

One of the following courses may be taken to fulfill Mathematics requirement. Math 2652 is preferred math course if you are required to take Math Praxis Core.

- MATH 2623 | Quantitative Reasoning | |
- MATH 2652 | Mathematics for Early Childhood Teachers 2 | |
- MATH 2665 | Foundations of Middle School Mathematics 2 (Mathematics Concentration takes this one) | |

Some courses are categorized in more than one Knowledge Domain. Courses can only be used once within the General Education model. Courses listed for Knowledge Domains below are required in this program. See page 2 for other General Education recommendations.

Arts and Humanities (6 s.h.)

- Natural Sciences (2 courses, 1 with lab) (7 s.h.)

The required 7 s.h. are met with courses in the major.

Social Science (6 s.h.)

- PSYC 1560 | General Psychology | 3 |
- Social Science elective (required 3 s.h. are met with courses in the major.) | |
- Social and Personal Awareness (6 s.h.) | |

Required 6 s.h. are met with courses in the major.

Major Requirements - Science Concentration

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<td>TCED 1500</td>
<td>Introduction to Becoming a Teacher First Year Experience Course BCOE</td>
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<tr>
<td>BIOL 1505</td>
<td>Biology and the Modern World (NS)</td>
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<td>CHEM 1500</td>
<td>Chemistry in Modern Living (NS)</td>
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<tr>
<td>GEO 1505 &amp; 1505L</td>
<td>Physical Geology and Physical Geology Laboratory (NS)</td>
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<tr>
<td>GEOL 2605</td>
<td>Historical Geography</td>
<td>4</td>
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<tr>
<td>PHYS 2607</td>
<td>Physical Science for Middle and Secondary Education (NS)</td>
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<td>ASTR 1504</td>
<td>Descriptive Astronomy (NS)</td>
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<td>ENST 2600</td>
<td>Foundations of Environmental Studies</td>
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Social Studies Concentration

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<td>World Civilization from 1500 (SS/SPA)</td>
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<td>HIST 2606</td>
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<td>HIST 3748</td>
<td>History of Ohio</td>
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<tr>
<td>GEOG 2640</td>
<td>Human Geography (SS/SPA)</td>
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GEOG 3717  Geography of Europe  3
POL 1560  American Government (SS)  3
POL 2640  Contemporary World Governments (SS/SPA)  3
POL 2695  Model United Nations  1
ECON 2610  Principles 1: Microeconomics (SS)  3
ECON 2631  Introductory Macroeconomics for Education Majors (SS)  3
ANTH 1500  Introduction to Anthropology (SS)  3

Professional Education Curriculum
EDFN 1501  Introduction to Education  3
PSYC 3709  Psychology of Education  3
SPED 2630  Individuals with Exceptionalities in Society  3
EDFN 3708  Education and Society  3
TEMC 3702  Teaching & Learning in Middle Schools  3

Preclinical Curriculum
TEMC 4801  The Middle School Learning Community  3
TEMC 4804  Middle Level Instructional Design and Student Outcomes  3
TEMC 3703  Thematic Instruction and Assessment Methods in Social Studies  3
TEMC 3705  The Teaching of Science in the Middle School  3

Student Teaching Curriculum
TEMC 4802  Student Teaching: Middle Childhood  10
TEMC 4803  Student Teaching Seminar for Middle Childhood Education  2

Total Hours Required for the Degree: 140 s.h.

1 Prerequisites for preclinical curriculum.
2 Upper division course.

**Advisement:**

- It is highly recommended that all teacher candidates meet with an academic advisor every semester.
- Freshmen, athletes, and students on warning and probation are required to meet with an advisor before registration.
- At the completion of 30 SH any teacher candidate who: 1) was required to and has not passed PRAXIS Core Exam(s), or 2) holds a GPA of 2.25 or below will be referred to Central Advising for advising and career services. If at a later date the teacher candidate passes all required parts of the Praxis Core Exam and attains a GPA of 2.25 or higher that student may return to BCOE for advising.

**Important Notes:**

- Neither admission to the University nor declaration of a major related to a teaching field guarantees admission to the BCOE’s Teacher Education Programs or candidacy for a teaching license.
- Formal Admission to Teacher Education (Upper-Division) is required before teacher candidates are allowed to enroll in certain junior and senior level courses in BCOE.
- Undetermined education majors must declare a major before applying for admission to a Teacher Education Program.
- Admission to a Teacher Education Program is obtained upon satisfactory completion of the following requirements:

  - Minimum completion of 50 SH
  - Minimum 2.75 overall GPA
  - Meet one of the following criteria:
  - Overall GPA 3.4 or better, OR
  - ACT scores of Reading-21, English-18, Math-22, AND/OR
  - SAT scores of Reading-450, Writing-430, Math-520, AND/OR
  - Praxis CORE scores, Reading-156, Writing-162, Math-150 (Attach a copy of your CORE scores to the application)

  - "B" average or better (A-C, B-B) for:
    - ENGL 1550, ENGL 1551

  If failure to meet "B" average above must also complete:

  - ENGL 2601 grade of "B" or better.
  - EDFN 1501, CMST 1545
  - EDFN 1501, CMST 1545
  - SPED 2630, ENGL 2651 or MATH 1564 or HIST 2606/1511 or BIOL 1505

If student does not have a "B" average, student will be required to retake one or more of these courses until the "B" average is achieved.

- A grade of "C" or better is required in all required major courses. Courses taken as "CR/NC" will not count towards the major
- Professional education and block courses may only be repeated once.
- Minimum requirements for teaching licenses are determined by the Ohio Department of Education; if those requirements change, they become effective immediately at Youngstown State University. (YSU Undergraduate Catalog).

**Upper-Division Application Process**

- Upper division application and forms must be printed from the BCOE website.
- After completing a minimum of 50 SH, submit the following:
  - Upper Division application
  - Good Moral Character Statement
  - copy of BCI & FBI clearances
  - schedule an upper division interview with the BCOE Office of Student Services, room 2101, no later than:
  - Upper Division Application Deadline
    - September 1—to register for Upper Division Courses for Spring
    - February 1—to register for Upper Division courses for Summer & Fall

  Each completed application is reviewed and approved by the Upper Division Admission and Retention Committee. If all requirements are met, the teacher candidate may register for Upper Division courses for the following semester. Upper Division courses are the courses designated with the "v" symbol. Applications submitted after the deadline will not be processed until the end of the respective semester.

**Program Notes:**

- If Math concentration is chosen, Math GER is not required. If Science concentration is chosen, Natural Science GER is fulfilled through subject area curriculum. If Language Arts concentration is chosen, Arts & Humanities GER is fulfilled through subject area curriculum. If Social
Completing a Bachelor of Science in Education without Licensure: Graduation Process:

- Candidates will not be permitted to take the following professional education courses more than twice: EDFN 1501, EDFN 3708, PSYC 3709, SPED 2630, TERG 2601, 3701, 3702, 3703, 2610, 3711, TEMC 4802, SED 4800, ECIS 2629, ECIS 3700, all preclinical experience courses, student teaching, and student teaching seminar.
- If the program is concerned regarding teacher candidate performance in the preclinical experience, as determined by CPAST criteria, the program coordinator may require the teacher candidate to complete an additional preclinical experience prior to the student teaching experience.

Preclinical Application with Request for Graduation Evaluation

- Preclinical application is completed on TaskStream. Directions are available on the BCOE website.
- Preclinical application and graduation evaluation request must be submitted one year prior to the intended preclinical semester no later than:
  - September 1—for Fall preclinical
  - February 1—for Spring preclinical
- Preclinical candidates are screened for eligibility based on GPA and course completion.

Student Teaching:

- Prerequisites:
  - BCOE Upper Division and Senior status,
  - Overall 2.75 GPA
  - Minimum of 2.67 GPA in subject area curriculum and professional education courses with no grade less than a "C" (each computed individually),
  - Passage of OAE test(s) and ACTFL tests for foreign language.
- Instructions for completing the Student Teaching Application and Forms are available on BCOE website. The application and forms must be completed and printed from the BCOE website and submitted to the BCOE Office of Student Services no later than:
  - September 1—to Student Teach the following Spring Semester
  - February 1—to Student Teach the following Fall Semester

Graduation Process:

- Apply for graduation during the first three weeks of the semester you plan to graduate. Graduation evaluation must be completed in advance of application for graduation.

Completing a Bachelor of Science in Education without Licensure:

- Teacher candidates who choose to graduate without licensure must apply for approval in the BCOE Office of Student Services.
- Once approved, teacher candidates graduating without licensure must take TCED 4830 (3 SH) capstone in place of student teaching.

### Year 1

#### Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>YSU 1500</td>
<td>Success Seminar</td>
<td>1</td>
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<tr>
<td>ENGL 1550</td>
<td>Writing 1</td>
<td>3-4</td>
</tr>
<tr>
<td>or ENGL 1549</td>
<td>Writing 1 with Support</td>
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<tr>
<td>MATH 2623</td>
<td>Quantitative Reasoning</td>
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<tr>
<td>POL 1560</td>
<td>American Government (counts as SS or SPA Elective)</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 1505 &amp; 1505L</td>
<td>Physical Geology and Physical Geology Laboratory</td>
<td>4</td>
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<tr>
<td>EDFN 1501</td>
<td>Introduction to Education</td>
<td>3</td>
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<table>
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<tbody>
<tr>
<td>TCED 1500</td>
<td>Introduction to Becoming a Teacher First Year Experience Course BCOE</td>
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#### Semester Hours

<table>
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<tr>
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#### Year 2

#### Fall

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<tr>
<td>ENGL 1551</td>
<td>Writing 2</td>
<td>3</td>
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<tr>
<td>CHEM 1500</td>
<td>Chemistry in Modern Living</td>
<td>3</td>
</tr>
<tr>
<td>SPED 2630</td>
<td>Individuals with Exceptionalities in Society</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 1560</td>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>HIST 1511</td>
<td>World Civilization to 1500</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 1505</td>
<td>Biology and the Modern World</td>
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<thead>
<tr>
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<tr>
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#### Year 3

#### Fall

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<tr>
<th>Course</th>
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<tbody>
<tr>
<td>TERG 3701</td>
<td>Phonics in Reading Instruction</td>
<td>3</td>
</tr>
<tr>
<td>ASTR 1504</td>
<td>Descriptive Astronomy</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 2630</td>
<td>Weather</td>
<td>3</td>
</tr>
<tr>
<td>POL 2640</td>
<td>Contemporary World Governments (counts as SS Elective)</td>
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<tr>
<td>GEOG 3717</td>
<td>Geography of Europe</td>
<td>3</td>
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<thead>
<tr>
<th>Course</th>
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<th>Semester Hours</th>
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#### Year 4

#### Fall

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<tr>
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<tbody>
<tr>
<td>ECON 2631</td>
<td>Introductory Macroeconomics for Education Majors</td>
<td>3</td>
</tr>
<tr>
<td>TEMC 3707</td>
<td>Science/Technology/Society</td>
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</tr>
<tr>
<td>GEOL 2605</td>
<td>Historical Geology</td>
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<tr>
<td>Arts and Humanities GER</td>
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<tr>
<td>TEMC 3702</td>
<td>Teaching &amp; Learning in Middle Schools</td>
<td>3</td>
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<tr>
<td>TERG 3703</td>
<td>Assessment and Instruction in Content Areas Middle</td>
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<table>
<thead>
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</thead>
<tbody>
<tr>
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</table>

### Bachelor of Science in Education in Middle Childhood Education (4-9), Science-Social Studies Concentration
The learning outcomes for this program, align with the 5 Standards of the Association for Middle Level Education (AMLE):

- Teachers understand student learning and development and respect the diversity of the students they teach.
- Teachers know and understand the content area for which they have instructional responsibility.
- Teachers understand and use varied assessments to inform instruction, evaluate and ensure student learning.
- Teachers plan and deliver effective instruction that advances the learning of each individual student.
- Teachers create learning environments that promote high levels of learning and achievement for all students.
- Teachers assume responsibility for professional growth, performance and involvement as an individual and as a member of a learning community.
- Teachers collaborate and communicate with students, parents, other educators, administrators and the community to support student learning. Teachers assume responsibility for professional growth, performance and involvement as an individual and as a member of a learning community.

The following learning outcomes are based on The Ohio Standards for the Teaching Profession. These standards were developed for use as a guide for teachers as they continually reflect upon and improve their effectiveness as educators throughout all of the stages of their careers. These standards serve as an important tool for teachers as they consider their growth and development in the profession. These standards in developing and content of our teacher education programs. They are interrelated and connect in teachers’ practice.

- Middle level teacher candidates understand, use, and reflect on the major concepts, principles, theories, and research related to young adolescent development and use that knowledge in their practice. They demonstrate their ability to apply this knowledge when making curricular decisions, planning and implementing instruction, participating in middle level programs and practices, and providing healthy and effective learning environments for all young adolescents.
- Middle level teacher candidates understand and use the central concepts, standards, research, and structures of content to plan and implement curriculum that develops all young adolescents’ competence in subject matter. They use their knowledge and available resources to design, implement, and evaluate challenging, developmentally responsive curriculum that results in meaningful learning outcomes. Middle level teacher candidates demonstrate their ability to assist all young adolescents in understanding the interdisciplinary nature of knowledge.
- Middle level teacher candidates understand the major concepts, principles, theories, and research underlying the philosophical foundations of developmentally responsive middle level programs and schools, and they work successfully within middle level organizational components.
- Middle level teacher candidates understand, use, and reflect on the major concepts, principles, theories, and research related to data-informed instruction and assessment. They employ a variety of developmentally appropriate instructional strategies, information literacy skills, and technologies to meet the learning needs of all young adolescents (e.g., race, ethnicity, culture, age, appearance, ability, sexual orientation, socioeconomic status, family composition).
- Middle level teacher candidates understand their complex roles as teachers of young adolescents. They engage in practices and behaviors that develop their competence as middle level professionals. They are informed advocates for young adolescents and middle level education, and work successfully with colleagues, families, community agencies, and community members. Middle level teacher candidates demonstrate positive dispositions and engage in ethical professional behaviors.

**Bachelor of Science in Education in Spanish (PK-12) - Multi-Age License**

Dr. Jennifer Behney, Program Coordinator

**Multi-Age Education (PK-12) Spanish**

**OVERVIEW**

The program in Spanish Education prepares students to become a teacher of foreign language at the high school, middle school, and elementary school levels in the state of Ohio. Graduates are fully licensed to teach Spanish in Ohio (Multi-age PK-12 Licensure) and are fully prepared in their knowledge of the target language, of best practices and standards in general pedagogy, and of specific Second Language Acquisition (SLA) theories and foreign language education techniques. Students enter student teaching in the last semester of study with a level of Advanced Low in both oral and written communication in the target language, as measured by the Oral Proficiency Interview (OPI) and the Writing Proficiency Test (WPT) and as required by the American Council on the Teaching of Foreign Languages (ACTFL).

The Multi-Age Spanish License, Grades PK-12, Bachelor of Science in Education degree requires a minimum of 120 semester hours of course work. This teaching field also requires passage of the Ohio Assessments for Educators in order to be eligible to student teach.

**Professional Dispositions:**

In addition to the above learning outcomes, teacher candidates are expected to display the following professional dispositions:

- Creating fairness in the classroom
- Providing an inclusive environment that is safe and conducive to learning
- Demonstrating the belief that all students can learn
- Fostering collaborative relationships to support student learning and well-being
- Exhibiting professional skills

**Field Experiences and Student Teaching**

Students complete a number of field experiences to support the learning of content and best practices in teaching. Field experiences offer opportunities to provide varying levels of classroom support (observing, one-on-one tutoring, small group teaching, whole class teaching).

**Preclinical Field Experiences**

The preclinical experience is conducted in local schools and provides an opportunity for teacher candidates to complete an in-depth field experience prior to student teaching. This field experience requires a substantial time commitment, as teacher candidates spend the entire day in schools during designated weeks. The Spanish Education preclinical experience is scheduled...
during the fall semester. Applications for the preclinical experience must be submitted to the Office of Student Field Experience, one year in advance (September 1st).

- FNLG 4801 Methods of Foreign Language Teaching
- EDFN 3710 Educational Assessment

Student Teaching

- SED 4827 Supervised Student Teaching: Language (K-12)
- SED 4842A Student Teaching Seminar for Secondary Education

Students complete a 16-week student teaching experience. Students must pass the edTPA performance-based assessment with a minimum score of 37 during this experience.

**Advisement**

Advisement is provided by the academic advisors in the Beeghly College of Liberal Arts, Social Sciences, and Education. Majors in this program must complete general education requirements, subject area curriculum requirements, reading course requirements, and professional education requirements. Prior to student teaching, all Spanish education majors must complete a preclinical experience.

**Required Assessments**

The Ohio Assessments for Educators (OAE) assesses the content area and professional (pedagogical) knowledge of candidates who are seeking initial Ohio educator license or adding a new license area. The assessments are aligned with Ohio's New Learning Standards. Teacher candidates must pass these exams prior to student teaching.

OAE 004 Assessment of Professional Knowledge: Multi-Age (PK-12)

ACTFL Oral Proficiency Interview, Writing Proficiency Test. These exams are administered by Language Testing International/ACTFL.

**COURSE** | **TITLE** | **S.H.**
--- | --- | ---
**FIRST YEAR REQUIREMENT - STUDENT SUCCESS**
YSU 1500 | Success Seminar | 1-2
or SS 1500 | Strong Start Success Seminar | 
or HONR 1500 | Intro to Honors | 

**General Education Requirements**

**ENGL 1550** | Writing 1 | 
**ENGL 1551** | Writing 2 | 
**CMST 1545** | Communication Foundations | 

**Mathematics Requirement**

One of the following courses may be taken to fulfill Math GER:

- Math 2652 is preferred math course if you are required to take Math Praxis Core
- MATH 2623 Quantitative Reasoning
- or MATH 265 Mathematics for Early Childhood Teachers 2
- or PHIL 2619 Introduction to Logic
- or STAT 2601 Introductory Statistics

**Arts and Humanities**

- 6

**Natural Sciences (2 courses 1 lab)**

- 7

**Social Science**

- 6

**PSYC 1560** | General Psychology | 

- Social Science GER

- 6

**Social and Personal Awareness**

- 6

**Subject Area Curriculum**

- TCED 1500 Introduction to Becoming a Teacher First Year Experience Course BCOE

**Bachelor of Science in Education in Spanish (PK-12) - Multi-Age License**

**COURSE** | **TITLE** | **S.H.**
--- | --- | ---
SPAN 2600 | Intermediate Spanish (A student who starts with SPAN 2605, may take SPAN 2600 Credit by Examination) | 4
SPAN 2605 | Advanced Intermediate Spanish | 3
SPAN 3702 | Intensive Spanish Review | 3
SPAN 3724 | Spanish Pronunciation | 3
SPAN 3735 | Advanced Spanish Grammar and Composition | 3
SPAN 3736 | Introduction to Spanish Linguistics | 3
SPAN 3755 | Advanced Spanish Conversation | 3
SPAN 4880 | Spanish Conversation and Composition Capstone | 3
FNGL 4899 | Professional Development for Teachers | 1
ENGL 4851 | Language Acquisition | 3

**Five of the following courses:**

- 15

<table>
<thead>
<tr>
<th><strong>COURSE</strong></th>
<th><strong>TITLE</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>SPAN 3740</td>
<td>Business Spanish</td>
</tr>
<tr>
<td>SPAN 3758</td>
<td>Culture and Literature of Spanish-Speaking Groups in the United States</td>
</tr>
<tr>
<td>SPAN 3762</td>
<td>Culture: Spain</td>
</tr>
<tr>
<td>SPAN 3763</td>
<td>Introduction to Literature: Spain</td>
</tr>
<tr>
<td>SPAN 3766</td>
<td>Culture: Spanish-America</td>
</tr>
<tr>
<td>SPAN 3767</td>
<td>Introduction to Literature: Spanish-America</td>
</tr>
</tbody>
</table>

**Professional Education Curriculum**

SED 3706 | Principles of Teaching Adolescents 2 | 3
EDFN 1501 | Introduction to Education | 3
SPED 2630 | Individuals with Exceptionalities in Society 1 | 3
EDFN 3708 | Education and Society | 3
PSYC 3709 | Psychology of Education | 3
TERG 3711 | Reading Application in Content Areas, Secondary Years 2 | 3

**Preclinical Curriculum**

FNGL 4801 | Methods of Foreign Language Teaching | 3
EDFN 3710 | Educational Assessment | 3

**Student Teaching Curriculum**

SED 4827 | Supervised Student Teaching: Language (K-12) 2 | 10
SED 4842A | Student Teaching Seminar for Secondary Education 2 | 2

**Total Semester Hours**

106-107

1 Prerequisites for preclinical curriculum
2 Upper Division Courses

**BCOE Notes:**

**Advisement:**

- **It is highly recommended that all teacher candidates meet with an academic advisor every semester.**
- Freshmen, athletes, and students on warning and probation are **required** to meet with an advisor before registration.
- **At the completion of 30 SH any teacher candidate who: 1) was required to and has not passed PRAXIS Core Exam(s), or 2) holds a GPA of 2.25 or below will be referred to Central Advising for advising and career services. If at a later date the teacher candidate passes all required parts of the Praxis Core Exam and attains a GPA of 2.25 or higher that student may return to BCOE for advising.**

**Important Notes:**

- Neither admission to the University nor declaration of a major related to a teaching field guarantees admission to the BCOE's Teacher Education Programs or candidacy for a teaching license.
- **Formal Admission to Teacher Education (Upper-Division) is required before teacher candidates are allowed to enroll in certain junior and senior level courses in BCOE.**
Program Notes:

- Undetermined education majors must declare a major before applying for admission to a Teacher Education Program.
- Admission to a Teacher Education Program is obtained upon satisfactory completion of the following requirements:
  - Minimum completion of 50 SH
  - Minimum 2.75 overall GPA
  - Meet one of the following criteria:
    - Overall GPA 3.4 or better, OR
    - ACT scores of Reading-21, English-18, Math-22, AND/OR
    - SAT scores of Reading-450, Writing-430, Math-520, AND/OR
    - Praxis CORE scores, Reading-156, Writing-162, Math-150
  (Attach a copy of your CORE scores to the application)

If you receive a “C” or below you will retake one or more of these courses until the “B” average is achieved.

- A “B” average or better is required in all required major courses. Courses taken as “CR/NC” will not count towards the major
- Professional education and block courses may only be repeated one time.
- Minimum requirements for teaching licenses are determined by the Ohio Department of Education; if those requirements change, they become effective immediately at Youngstown State University. (YSU Undergraduate Catalog).

Preclinical Application with Request for Graduation Evaluation

- Prerequisites:
  - BCOE Upper Division and Senior status,
  - Overall 2.75 GPA
  - Minimum of 2.67 GPA in subject area curriculum and professional education courses with no grade less than a “C” (each computed individually),
  - Passage of OAE test(s) and ACTFL tests for foreign language.
- Instructions for completing the Student Teaching Application and Forms are available on BCOE website. The application and forms must be completed and printed from the BCOE website and submitted to the BCOE Office of Student Services no later than:
  - September 1 —for Fall preclinical
  - February 1 —for Spring preclinical
- Preclinical candidates are screened for eligibility based on GPA and course completion.

Student Teaching:

- Prerequisites:
  - BCOE Upper Division and Senior status,
  - Overall 2.75 GPA
  - Minimum of 2.67 GPA in subject area curriculum and professional education courses with no grade less than a “C” (each computed individually),
  - Passage of OAE test(s) and ACTFL tests for foreign language.
- Instructions for completing the Student Teaching Application and Forms are available on BCOE website. The application and forms must be completed and printed from the BCOE website and submitted to the BCOE Office of Student Services no later than:
  - September 1 —to Student Teach the following Spring Semester
  - January 1 —to Student Teach the following Fall Semester

Graduation Process:

- Apply for graduation during the first three weeks of the semester you plan to graduate. Graduation evaluation must be completed in advance of application for graduation.

Completing a Bachelor of Science in Education without Licensure:

- Teacher candidates who choose to graduate without licensure must apply for approval in the BCOE Office of Student Services.
- Once approved, teacher candidates graduating without licensure must take TCED 4830 (3 SH) capstone in place of student teaching.

Program Notes:

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Youngstown State University Undergraduate
Endorsements

Early Childhood Generalist (Grades 4-5)

The Department of Teacher Education and Leadership Studies offers the Early Childhood Generalist (Grades 4-5) endorsement. This endorsement is approved by the State of Ohio and is offered online. This endorsement may be added to an existing Early Childhood Education (P-3) license, for teaching grades 4-5 in Math, Science, Social Studies, and Language Arts. This is not a major and does not stand alone as an area of study.

The endorsement is offered during summer semesters through web-based instruction. A 50-hour field experience is required. Passage of the OAE 018 (subtest 1) and 019 (subtest 2) examinations are required.

EMCE 5801 Early Childhood Generalist Science
EMCE 5802 Early Childhood Generalist Math
EMCE 5803 Early Childhood Generalist Language Arts

Notes:

1. Prior to student teaching, students must achieve a level of Advanced Low on the Oral Proficiency Interview and on the Writing Proficiency Test, both administered by the American Council on the Teaching of Foreign Languages.

2. Students who change from the B.S. in Spanish Education to the B.A. in Spanish will need to complete a minor and, in addition to coursework in the Spanish major, will need 20 hours at the 3700 level or higher.

Learning Outcomes

• Cultural Understanding – The student will develop an understanding and appreciation of the history and culture of those areas in which the target language is spoken.
• Reading Comprehension – The student will be able to read and understand a variety of materials written in the target language. These materials may include but are not limited to: novels, plays, poetry, newspaper and magazine articles, and private correspondence (e.g., business communications).
• Listening Comprehension – The student will be able to understand the target language when spoken in a variety of contexts. These contexts may include but are not limited to: conversation with another individual or individuals, formal lectures, song, and film.
• Oral Expression – The student will be able to carry on a conversation and deliver a speech in the target language. The student will achieve a level of Advanced Low on the Oral Proficiency Interview administered by the American Council on the Teaching of Foreign Languages.
• Written Expression – The student will be able to compose in the target language a variety of written documents. These documents may include but are not limited to: formal and casual correspondence, essays, and creative works. The student will achieve a level of Advanced Low on the Writing Proficiency Test administered by the American Council on the Teaching of Foreign Languages.
Department of English and World Languages

Welcome

Majors in the Department of English and World Languages share a love of language; they read while waiting for a scheduled appointment and write in a journal or commonplace book; they enjoy word games and puzzles and notice unusual uses of words or phrases and incorrect applications of grammar rules. They wish to visit places, observe characters, and absorb the language created in all kinds of texts. The Department of English and World Languages welcomes those who seek diversity, who understand the limits of their own worldviews and who seek ways to understand others. Language is a foundational human bond. We come to language and literature and linguistics and writing to wonder, to understand, to inspire, and to work. You are welcome here.

Our department’s mission is educate citizens to use language effectively and to appreciate the history, diversity, and complexity of their culture. The department seeks to improve students’ abilities to read and write, to listen attentively and to communicate, to think analytically and creatively, to appreciate the aesthetics of literature, and to value diverse cultures. Department faculty teach purposefully, leading investigations of writing, language, literature, and culture, work informed by research and scholarly activity, service to the University, and broad-based community involvement.

For information, contact Jeff Buchanan, Department Chair: jmbuchanan@ysu.edu

Academic Programs

The Department of English and World Languages offers:

- Bachelor of arts (BA) degrees in: Italian, Spanish, English, and Professional and Technical Writing
- In collaboration with the Department of Teacher Education and Leadership Studies, Bachelor of science (BS) degrees in: Italian Education, Spanish Education, and Integrated Language Arts.
- Masters of Arts (MA) degrees in: English and English with a Professional and Technical Writing focus.
- A Master of Arts (MFA) in Creative Writing.
- Graduate certificates in: Literature for Children and Young Adults, the Teaching of Writing, Teaching English to Speakers of Other Languages (TESOL), and Professional and Technical Writing.
- Coursework in American Sign Language, Arabic, Chinese, German, Latin, Ancient Greek, and Film Studies.

Academic Activities

Students interested in French, Italian, or Spanish, including non-majors and non-minors, are invited to participate in the French, Italian, or Spanish Club. Club activities include regular meetings, conversation hours, organized
dinner, and attendance at various events such as Opera Western Reserve and the Cleveland International Film Festival.

The Department strongly encourages all students to study abroad.

Chair

Jeffrey M. Buchanan, Ph.D., Acting Chair

Professor

Corey E. Andrews, Ph.D., Professor

Diana Awad-Scrocco, Ph.D., Associate Professor

Kevin E. Ball, Ph.D., Professor

Rebecca A. Barnhouse, Ph.D., Professor

Christopher Barzak, M.F.A., Professor

Laura L. Beadling, Ph.D., Associate Professor

Jennifer Behney, Ph.D., Associate Professor

Terry Benton, Ph.D., Assistant Professor

Philip Sean Brady, Ph.D., Professor

Suzanne Diamond, Ph.D., Professor

Alyssa M. Falcone, Ph.D., Distinguished Visiting Professor

Timothy Francisco, Ph.D., Professor

Jay L. Gordon, Ph.D., Associate Professor

Stacy Graber, Ph.D., Associate Professor

Lucas D. Hardy, Ph.D., Associate Professor

Alena Kirova, Ph.D., Assistant Professor

Ndinzi Masagara, Ph.D., Associate Professor

Diana Q. Palardy, Ph.D., Professor

Nicole Pettitt, Ph.D., Assistant Professor

Steven Reese, Ph.D., Professor

John E. Sarkissian, Ph.D., Professor

Dolores V. Sisco, Ph.D., Assistant Professor

Linda J. Strom, Ph.D., Associate Professor

Stephanie A. Tingley, Ph.D., Professor

Gina Villamizar, Ph.D., Associate Professor

Lecturer

Russell Brickey, Ph.D., Lecturer

Ronald Fields, M.A., Lecturer

Robyn Gaier, M.A., Lecturer

Jacklynn Mercer, M.A., Lecturer

Cynthia Vigliotti, M.A., Senior Lecturer

Majors

- BA in English (p. 187)
- BA in Professional and Technical Writing (PTW) (p. 188)
- BA in Italian (p. 197)
- BA in Spanish (p. 197)

Minors

- Minor in English Studies (p. 190)
- Minor in British and American Studies (p. 190)
- Minor in Professional and Technical Writing (http://catalog.ysu.edu/undergraduate/colleges-programs/college-liberal-arts-social-sciences-education/departments-english/minor-professional-writing-editing/)
- Minor in Linguistics (p. 191)
- Minor in Creative Writing (p. 190)
- M (http://catalog.ysu.edu/undergraduate/colleges-programs/college-liberal-arts-social-sciences/department-foreign-languages-literatures/french-minor/) in French (p. 200)
- Minor in (p. 200) Italian (http://catalog.ysu.edu/undergraduate/colleges-programs/college-liberal-arts-social-sciences/department-foreign-languages-literatures/italian-minor/)
- Minor in (p. 200) Spanish (http://catalog.ysu.edu/undergraduate/colleges-programs/college-liberal-arts-social-sciences/department-foreign-languages-literatures/spanish-minor/)
- Minor in (p. 200) Greek Studies (http://catalog.ysu.edu/undergraduate/colleges-programs/college-liberal-arts-social-sciences/department-foreign-languages-literatures/greek-studies-minor/)
- Minor in (p. 200) Latin (http://catalog.ysu.edu/undergraduate/colleges-programs/college-liberal-arts-social-sciences/department-foreign-languages-literatures/latin-minor/)

Certificates

- French Certificate (p. 201)
- Italian Certificate (p. 201)
- Spanish Certificate (p. 201)

English

Programs in English

In English, a student can earn a BA with a focus on British and American Literature or in Professional and Technical Writing. Minors are also available in English Studies, British and American Literature, Professional and Technical Writing, Linguistics, and Creative Writing.

Literature majors learn to demonstrate an attentiveness to textual detail; they are able to explain the relationship between texts and their broader literary, historical, and cultural contexts; literature majors analyze ways in which forms, culture, and identity influence both the production of texts and the critical reception of those texts; as writers, majors arrange and place arguments, using appropriate source material and clear, organized language. Students are well-positioned for careers that build on these skills—analysis, communication, writing, collaboration—and for graduate school in English, Law, and/or Business.

Professional and Technical Writing majors learn to produce clear, effective, well-edited writing to serve the needs of various public and professional audiences; they learn to adapt to working environments that are changing rapidly due to advances in information technology; and they are able to develop a role using their individualized skills and knowledge. Students go on to enjoy successful careers as writers, editors, and document developers. Our graduates work as professional and technical writers,
as marketing and public relations specialists, and as teachers, trainers, and consultants.

Students seeking a minor are encouraged to explore. We offer opportunities to write in academic, professional, and creative genres and to study language and its social and cultural functions. Our programs spark the imagination and teach students to read carefully and write purposefully.

**ENGL 1509 Academic English for Non-native Speakers 3 s.h.**
Development of writing and reading comprehension skills in English through outlining, summary, and response. Emphasis on vocabulary, main idea, detail, and conclusion in assigned reading and writing. Entrance on basis of English-as-a-Second-Language placement test. Must be taken until a grade of C or better is achieved. May be repeated once with a different topic. Does not count toward a degree. Grading is ABC/NC.

**ENGL 1512 English Conversation for Non-native Speakers 1 s.h.**
Development of conversation skills. Focus on oral-aural fluency, idiomaticity, extracting and organizing information, and situation-oriented communication strategies. Emphasis on meaningful topics relevant to the students' pursuit of their academic goals. Entrance on basis of English-as-a-Second-Language placement test. Does not count toward a degree. Grading is ABC/NC.

**ENGL 1540 Introduction to College Writing 3 s.h.**
Practice in adapting college-level writing conventions, organizational strategies, and revision and editing techniques to a variety of writing tasks. Focus on responding to written texts in ways that demonstrate expressive, analytical, and evaluative thinking. Students divide their time between regular classrooms and computer classrooms, where they have the opportunity to acquire and develop basic word-processing and electronic communication skills. Does not count toward the graduation requirement in composition. Open to students on the basis of Composition and Reading Test results. Grading is ABC/NC. Does not count toward the graduation requirement in composition and does not count toward a degree.

**ENGL 1541 Introduction to College Writing 3 s.h.**
Intensive individualized instruction in written communication and college-level reading practices in a computer-assisted environment. Open to students based upon ACT/SAT/Composition Placement Test results. Grading for English 1541 is ABC/NC. Does not count toward the graduation requirement in composition and does not count toward a degree. Next course in sequence must be the 4 s.h. hours ENGL 1549 Writing 1 with Support.

**ENGL 1549 Writing 1 with Support 4 s.h.**
Strategies for writing as a means of critical inquiry, with focus on writing processes and on the roles of writer, audience, and purpose as they affect writing. Students divide their time between regular and computer classrooms, where they acquire and develop basic word-processing and electronic communication skills. This four-credit hour version of Writing One emphasizes development of college-level writing conventions, organizational strategies, and revision and editing techniques. Grading is ABCDF, but students must earn a "C" or better to satisfy the General Education requirement and continue to ENGL 1551 or ENGL 1551H.
**Prereq.:** Appropriate ACT/SAT scores or completion of English 1541.

**ENGL 1550 Writing 1 3 s.h.**
Strategies for writing as a means of critical inquiry, with focus on writing processes and on the roles of writer, audience, and purpose as they affect writing. Students divide their time between regular and computer classrooms, where they acquire and develop basic word-processing and electronic communication skills. Open to students on the basis of Composition and Reading Test results or successful completion of ENGL 1509 or ENGL 1539 or ENGL 1540. Grading is ABCDF but must earn a "C" or better to satisfy the General Education requirement and continue to ENGL 1551 or ENGL 1551H.

**ENGL 1550C Corequisite Support for Writing 1 1 s.h.**
This course is intended to provide corequisite support for students requiring remediation in writing while they are concurrently enrolled in English 1550. Emphasis will be placed on the development of college-level writing conventions, organizational strategies, and editing techniques. Open to students based upon ACT/SAT scores or Composition Placement Test results. Grading is ABCDF but must earn a "C" or better to satisfy the General Education requirement and continue to ENGL 1551 or ENGL 1551H. Does not count toward a degree.

**ENGL 1551 Writing 2 3 s.h.**
Practice in writing with emphasis on the process of investigation: exploration of topics, formulation of tentative theses, collection of data from suitable primary and secondary sources, and clear and appropriate presentation of the results of these inquiries. Students divide their time between regular and computer classrooms, where they have the opportunity to perform online research. Grading is ABCDF but must earn a "C" or better to satisfy the General Education requirement. 
**Prereq.:** ENGL 1549 with a grade of "C" or better or ENGL 1550 with a grade of "C" or better or ACT/SAT scores or Composition and Reading Test results.

**ENGL 1551H Honors Writing 2 3 s.h.**
Research on a topic of some depth, conducted independently and focused on a single project that results in a substantial investigative paper. Students divide their time between regular and computer classrooms, where they have the opportunity to perform online research. Grading is ABCDF but must earn a "C" or better to satisfy the General Education requirement. 3 s.h.
**Prereq.:** Admission to the Honors Program and ENGL 1550H with a grade of "C" or better.

**ENGL 1560 Language, Ethnicity, and Gender 3 s.h.**
Basic understanding of relations between ethnicity, gender, and speech style, distinguishing linguistics, sociolinguistics, and women's issues. Examination of topics such as language, socialization, oral vs written language, language and class membership, and intra-ethnicity variation in Urban Vernacular English.

**ENGL 1590 Introduction to Literature 3 s.h.**
Literary works from various genres and periods by culturally diverse authors. Students learn literary terms to analyze and interpret literature. A major goal is to improve critical thinking skills by relating literature to film, music, art and/or live performance.

**Gen Ed: Arts and Humanities.**

**ENGL 2601 Intermediate Writing for Teachers 3 s.h.**
A course to increase proficiency in critical reading and writing. Designed specifically for students entering the College of Education; reading, discussions and writing assignments emphasize current issues in Education. Assignments allow students to practice, collaboratively and individually, the kinds of writing used in teaching. Does not count toward the English major.
**Prereq.:** Completion of ENGL 1551 with grade "C" or better.

**ENGL 2610 World Literature 3 s.h.**
A survey of nonwestern literatures, emphasizing their cultural, historical, literary, and global contexts.

**Gen Ed: Arts and Humanities, International Perspectives, Social and Personal Awareness.**
ENGL 2615  Science Fiction and Fantasy Literature  3 s.h.
Works from the science fiction and fantasy genres are read and discussed
critically to promote understanding and enjoyment of reading.
Gen Ed: Arts and Humanities.

ENGL 2617  Women in Literature  3 s.h.
Examination of works by and about women, drawn primarily from American
and English writers.
Gen Ed: Arts and Humanities, Domestic Diversity, Social and Personal
Awareness.

ENGL 2618  American Literature and Diversity  3 s.h.
Writers and works in relation to the diversity of American culture, politics,
lifestyles, and social movements.
Gen Ed: Arts and Humanities, Domestic Diversity, Social and Personal
Awareness.

ENGL 2620  African Literature  3 s.h.
Survey of African literature, with emphasis on experiences, styles, and themes
of African writers, as well as the effects of African literature on cultural
discourse throughout the world.
Gen Ed: Arts and Humanities.

ENGL 2623  Literature, Work, and Class  3 s.h.
Analysis of literary representations of work and class, with special attention to
working class authors, subjects, and styles. Focuses on social and historical
influences, as well as the impact of social changes and new knowledge upon
working-class literature.

ENGL 2630  LGBTQIA Literature  3 s.h.
Explores literature by LGBTQIA authors about LGBTQIA issues and themes
with the goal to expose the vibrancy and range of the literature of "queerness."
Gen Ed: Arts and Humanities, Domestic Diversity, Social and Personal
Awareness.

ENGL 2631  Mythology in Literature  3 s.h.
Introductory study of myths, chiefly classical, with some attention to their
origins and cultural significance, and of literary works, both classical and
modern, in which myths are used.
Gen Ed: Arts and Humanities.

ENGL 2646  Introduction to Fiction Writing  3 s.h.
Examination and application of narrative techniques and conventions
designed to introduce the basic elements of writing fiction.
Prereq.: Completion of ENGL 1551 with grade "C" or better.

ENGL 2647  Introduction to Poetry Writing  3 s.h.
Examination and application of poetic techniques and conventions designed to
introduce the basic elements of writing poetry.
Prereq.: Completion of ENGL 1551 with grade "C" or better.

ENGL 2651  Introduction to Language  3 s.h.
Introduction to language principally for prospective teachers, with emphasis
on the nature and function of language and its history, variations, and
acquisition.
Prereq.: Completion of ENGL 1551 with grade "C" or better.
Gen Ed: Domestic Diversity, Social Science, Social and Personal Awareness.

ENGL 2665  Introduction to Film Study  3 s.h.
Introduction to film as a medium of artistic expression. Technical aspects of
film and the relationship of film to other media and to society.
Gen Ed: Arts and Humanities.

ENGL 3700  Literary Study  3 s.h.
Gateway course for English majors. Content to include key terms, strategies
for reading, interpretation, research, and the conventions for assessing and
using sources.
Prereq.: Completion of ENGL 1551 with grade "C" or better.

ENGL 3703  Literature for Young Children  3 s.h.
Study of the development of children's literature, giving the prospective
elementary teacher criteria for evaluating books for children. Required of all
elementary education candidates.
Prereq.: Completion of ENGL 1551 with grade "C" or better.

ENGL 3704  Literature for Middle School Readers  3 s.h.
Study of fiction and nonfiction genres for students in the middle school
grades, including characters and authors from various cultures and ethnicities.
Required of middle childhood reading and language arts majors.
Prereq.: Completion of ENGL 1551 with grade "C" or better.

ENGL 3705  Young Adult Literature  3 s.h.
Study of literature for and about adolescents and of related topics, including
young adults as readers, critical standards for evaluation, and the use of
adolescent literature in secondary schools.
Prereq.: Completion of ENGL 1551 with grade "C" or better.

ENGL 3706  Introduction to Literary Theory  3 s.h.
Provides an introduction to literary theory and criticism for English majors,
emphasizing the history and application of critical approaches to literature.
By reading core works in literary theory, students will learn application of
theoretical approaches to various texts.
Prereq.: ENGL 1551 grade of "C" or higher.

ENGL 3710  British Literature 1  3 s.h.
Beginnings to the Enlightenment. Students read a selection of British
literature, emphasizing literary history and written analysis.
Prereq.: ENGL 3700 or concurrent with ENGL 3700.

ENGL 3711  British Literature 2  3 s.h.
From Romanticism to the Present. Students read a selection of British
literature, emphasizing literary history and written analysis.
Prereq.: ENGL 3700 or concurrent with ENGL 3700.

ENGL 3712  American Literature 1  3 s.h.
Colonial period to 1865. Examine works from a range of American authors
and genres drama, fiction, poetry, short stories, novels, and non-fiction essays
within their cultural, historical, and literary contexts.
Prereq.: ENGL 3700 or concurrent with ENGL 3700.

ENGL 3713  American Literature 2  3 s.h.
1865 to present. Examine works from a range of American authors and genres
drama, fiction, poetry, short stories, and non-fiction essays within their cultural,
historical, and literary contexts.
Prereq.: ENGL 3700 or concurrent with ENGL 3700.

ENGL 3715  Graphic Novels as Literature  3 s.h.
Considers graphic novels as literature representing an increasingly wide range
of cultural experiences. Both comics theory and a range of graphic narratives,
including non-fiction, memoir, superhero, history, crime/true crime, etc., are
explored.
Prereq.: ENGL 1551.

ENGL 3730  Teaching Language Arts  3 s.h.
Introduces middle school language arts teacher candidates to discussions
about the teaching of writing and language and the development of methods
of teaching reading, writing, and language.
Prereq.: ENGL 1551 with a grade of "C" or better.

ENGL 3732  Images of Women  3 s.h.
An examination through language, literature, folklore, film and myth of the
ways in which the meanings and representations of women have been
constructed and implemented in Western culture. Introduces key concepts and
theoretical frameworks drawn from current scholarship about women.
Prereq.: Completion of ENGL 1551 with grade "C" or better.

ENGL 3737  Popular Culture Studies  3 s.h.
Introduction to critical issues and approaches to popular culture through
the study of various texts from literature, television, film, advertising, popular
music, and computer cybertulture.
Prereq.: ENGL 1551 with grade of "C" or better.

ENGL 3738  Selected Topics in World Literature  3 s.h.
A comparative examination of a genre, historical period, or literary movement.
May be repeated once with different topic.
Prereq.: Completion of ENGL 1551 with grade "C" or better.
ENGL 3739 Writing for Middle School Teachers 3 s.h.
Designed to strengthen proficiency in writing, with emphasis on issues related to the teaching of English in middle school. Limited to students seeking middle childhood licensure with a concentration in Language Arts.
Prereq.: Admission to upper division status in the Beeghly College of Education.

ENGL 3740 Advanced Writing 3 s.h.
Designed to strengthen proficiency in essay writing, with emphasis on the development of ideas, analysis of style, clarity of thought and expression, editing, and proofreading.
Prereq.: Completion of ENGL 1551 with grade "C" or better.

ENGL 3741 Advanced Writing for Teachers 3 s.h.
Designed to strengthen proficiency in writing, with emphasis on issues relating to the teaching of English. Limited to students seeking English or Integrated Language Arts certificates.
Prereq.: Admission to upper-division status in the College of Education.

ENGL 3742 Business Writing 3 s.h.
Introduction to the elements of business writing: audience and task analysis; techniques of gathering, interpreting, and presenting business research; appropriate conventions, genres, styles, and formats; elements of collaborative, global, and electronic communication; and application of computer technology to document design and production.
Prereq.: C or better in ENGL 1551.

ENGL 3743 Professional and Technical Writing 3 s.h.
Introduction to the elements of professional and technical writing, including audience and task analysis; techniques of gathering, interpreting, and presenting information; appropriate conventions, styles, and formats; elements of collaborative, global, and electronic communication; and application of computer technology to the design and production of documents.
Prereq.: ENGL 1551 with grade "C" or better.

ENGL 3744 Proposal and Report Writing 3 s.h.
Application of rhetorical strategies and principles of design to the preparation of texts in two specific professional writing genres: the proposal (such as grant and research proposals) and the report (such as technical, feasibility, and other kinds of reports).
Prereq.: ENGL 1551 with grade "C" or better.

ENGL 3745 Writing for Online Environments 3 s.h.
Analysis of the rhetoric of online discourse and exploration of techniques for producing documents meant to be accessed online. Students will use web design applications and other social media platforms for producing their own online writing.
Prereq.: ENGL 1551 with grade "C" or better.

ENGL 3746 Fiction Writing Workshop 3 s.h.
Supervised workshop in which students develop their individual narrative skills, styles, and talents. May be repeated once.
Prereq.: ENGL 2646.

ENGL 3747 Poetry Writing Workshop 3 s.h.
Supervised workshop in which students develop their individual poetic skills, styles, and talents. May be repeated once.
Prereq.: ENGL 2647.

ENGL 3748 Screenwriting 3 s.h.
Examination and application of story concepts, theme and character development, structure, page design, and formatting. Students will develop their own story, treatment, and screenplay. May be repeated once.
Prereq.: Completion of ENGL 1551 with grade "C" or better.

ENGL 3749 Writing the Youth Novel 3 s.h.
Examination and application of elements associated with novels for young readers. Students will develop their own narrative skills, styles, and talents in a supervised workshop. May be repeated once.
Prereq.: ENGL 2646.

ENGL 3750 Language and Culture 3 s.h.
Language structure as an instrument in human behavior and social institutions with emphasis on cross-cultural and intercultural communication.
Prereq.: Completion of ENGL 1551 with grade "C" or better.

ENGL 3751 Readings in Professional and Technical Writing 3 s.h.
Analysis of technical and professional documents and texts that examine issues including clarity, choice of language, audience, tone, and writing in specific genres.
Prereq.: ENGL 1551 with grade "C" or better.

ENGL 3755 Principles of Linguistic Study 3 s.h.
Survey of elements of linguistic structure, methods of analysis and description, theoretical models, and the role of language in human affairs.
Prereq.: Completion of ENGL 1551 with grade "C" or better.

ENGL 3757 Development of the English Language 3 s.h.
Sounds, vocabulary, grammar, and usage, from old to contemporary English.
Prereq.: Completion of ENGL 1551 with grade "C" or better.

ENGL 3765 Film Genres 3 s.h.
Study of a particular type of film, such as comedy, western, documentary, or science fiction. May be repeated once with a different topic.
Prereq.: ENGL 3710, ENGL 3711, ENGL 3712, ENGL 3713 or ENGL 2665.

ENGL 3770 American Literature in Historical Perspective 3 s.h.
Poetry, prose, drama, and other forms of literary expression examined within the context of a specific aspect of American social, intellectual, and cultural history. May be repeated once with different topic.
Prereq.: ENGL 3700 or concurrent.
Cross-listed: AMER 3770.

ENGL 3780 American Genres 3 s.h.
Study of a particular type of literature (e.g., short story, autobiography, or film) as it developed in the United States. May be repeated once with a different topic.
Prereq.: ENGL 3700 or concurrent.

ENGL 3790 Selected Topics in Multicultural Studies 3 s.h.
Concentrated study of discourse in English, primarily literature, from cultures other than the dominant or majority culture of a given society. Designed to develop awareness and sensitivity to issues of difference, power, and cross-cultural perspectives, and to address and facilitate students' multicultural literacy. May be repeated once with different topic.
Prereq.: Completion of ENGL 1551 with grade "C" or better.

ENGL 4830 Major Figures in British Literature 3 s.h.
Concentrated study of the works of a British writer who has contributed significantly to the literary tradition. May be repeated once with different topic.
Prereq.: ENGL 3700 with a grade of "C" or higher.

ENGL 4831 British Genres, Circles, and Movements 3 s.h.
Study of a literary genre, a group of writers who shared a cultural context or who influenced one another's work, or a trend or development in literature. May be repeated once with different topic.
Prereq.: ENGL 3700 with a grade of "C" or higher.

ENGL 4843 Advanced Professional and Technical Writing 3 s.h.
Advanced instruction in professional and technical writing, expanding on knowledge and skills developed in ENGL 3742 or 3743, with emphasis on the creation and design of complex documents using tools such as Microsoft Word and Adobe InDesign.
Prereq.: ENGL 3742 or ENGL 3743 with grade "C" or better.

ENGL 4849 Professional and Technical Editing 3 s.h.
Study of the skills needed to make appropriate decisions about the content, grammar, mechanics, style, organization, and format of scholarly, trade, journalistic, and other professional publications, including newsletters and electronic publications. Topics include stages in the publishing process, proofreading, hard-copy versus online editing, mechanical and substantive editing, and the use of house and press styles.
Prereq.: Completion of ENGL 3742 or ENGL 3743 with grade "C" or better.
ENGL 4850  Sociolinguistics  
3 s.h.
An investigation of the relationship between language and society. Includes
discussion of dialects and standard language, language planning, linguistic
identity, multi- and bilingualism, class, gender, ethnicity, and social interaction.
Listed also as FNLG 4850.
Prereq.: ENGL 2651 or ENGL 3755.

ENGL 4851  Language Acquisition  
3 s.h.
A study of research on the learning of first and second languages. Topics include
developmental sequences, learner variables, critical periods and
conditions for learning, and the roles of input and interaction. The course is
designed for those planning to teach languages. Listed also as FNLG 4851.
Prereq.: ENGL 2651 or ENGL 3755.

ENGL 4852  Linguistics and Literacy  
3 s.h.
Examination of the linguistic, social, and cultural dimensions of reading and
writing and their impact on literacy acquisition and performance in language.

Prereq.: ENGL 2651 or ENGL 3755.

ENGL 4855  Advanced Linguistics  
3 s.h.
In-depth study of selected issues in contemporary linguistic theory. Especially
recommended for students pursuing advanced studies or a minor in linguistics
or planning graduate studies.
Prereq.: ENGL 2651 or ENGL 3755.

ENGL 4856  TESOL Methods  
3 s.h.
Introduction to teaching English as a Second Language (ESL), including
reading, writing, listening, and speaking. Focus on using communicative
methods with non-native speakers.
Prereq.: ENGL 4856.

ENGL 4857  TESOL Practicum  
3 s.h.
Supervised teaching in English as a Second Language (ESL) program.
Additionally, weekly seminar attendance required.
Prereq.: ENGL 4856.

ENGL 4858  English Grammar  
3 s.h.
Descriptions and analysis of English language structure.
Prereq.: ENGL 2651 or ENGL 3755.

ENGL 4859  Selected Topics in Discourse  
3 s.h.
Study in depth of a specific topic such as stylistics, semantics, or rhetoric. May
be repeated once with different topic.
Prereq.: ENGL 3740, ENGL 3741, or ENGL 3755 as appropriate to topic.

ENGL 4860  The Medieval World  
3 s.h.
British literature from the Anglo-Saxon period to the age of Chaucer, presented
in the context of the period's history and culture.
Prereq.: ENGL 3700 with grade of "C" or higher.

ENGL 4862  Themes in American Literature  
3 s.h.
In-depth examination of a significant theme in American literature and culture
through analysis of prose, poetry, drama, and/or film from different historical
periods.
Prereq.: ENGL 3700 with grade of "C" or higher.

ENGL 4864  American Literary Conversations  
3 s.h.
Study of two or more American writers whose work is related. Focuses on
writers who influenced each other, who wrote during the same period, or who
explored similar themes or used similar literary styles.
Prereq.: ENGL 3700 with grade of "C" or higher.

ENGL 4865  Selected Topics in Film  
3 s.h.
An important aspect of or approach to film not covered in other courses. May
be repeated once with different topic.
Prereq.: ENGL 3710, ENGL 3711, ENGL 3712, ENGL 3713, or ENGL 2665.

ENGL 4871  The Black Experience in American Literature  
3 s.h.
Study of African-American literature that explores the intersections between
race, gender, and class in America, with emphasis on black minority culture,
experience, and perspective.
Prereq.: ENGL 3700 with a grade of "C" or higher.

ENGL 4872  Shakespeare and His World  
3 s.h.
Study of Shakespeare's works along with an exploration of the artistic and
social forces that shaped his writing.
Prereq.: ENGL 3700 with a grade of "C" or higher.

ENGL 4873  The English Renaissance  
3 s.h.
Study of British literature from 1500 to 1660 and the social, cultural, and
artistic forces that influenced it.
Prereq.: ENGL 3700 with a grade of "C" or higher.

ENGL 4874  Restoration and Eighteenth Century British Literature  
3 s.h.
Study of British literature of the period and the social, cultural, and
artistic forces that influenced it.
Prereq.: ENGL 3700 with a grade of "C" or higher.

ENGL 4875  The Romantic Period  
3 s.h.
Study of British literature from 1776 to 1832 and the social, cultural, and
artistic forces that influenced it.
Prereq.: ENGL 3700 with grade of "C" or better.

ENGL 4876  Senior Seminar  
3 s.h.
Study of literature, linguistics, or criticism and theory requiring a long, critical,
research-based paper.
Prereq.: ENGL 3700 and at least one of the following ENGL 3710, ENGL 3711,
ENGL 3712 or ENGL 3713.
Gen Ed: Capstone.

ENGL 4877  Individual Study  
1-3 s.h.
Exploration of a topic in English studies. An academic project or written
report produced in consultation with an English instructor is required. May be
repeated with different topics for a maximum of 3 s.h.
Prereq.: Senior standing in English and department permit.

ENGL 4878  Nineteenth Century British Literature Studies  
3 s.h.
Nineteenth-century writers, works, and themes read in the context of the
period's culture and history.
Prereq.: ENGL 3700 with a grade of "C" or higher.

ENGL 4879  Early Twentieth Century British Studies  
3 s.h.
Literature read in the context of the period's literary movements, culture, and
history.
Prereq.: ENGL 3700 with a grade of "C" or higher.

ENGL 4880  British Literature from World War II to the Present  
3 s.h.
Literature read in the context of the period's literary movements, culture, and
history.
Prereq.: ENGL 3700 with a grade of "C" or higher.

ENGL 4881  English Internship  
1-3 s.h.
Supervised experience directed by an English faculty member and a
designated representative of a participating organization. Enrollment is
contingent upon the availability of internships. Students are selected on the
basis of qualifications including GPA, courses taken, recommendations and an
interview.
Prereq.: 12 hours of English, junior or senior standing, and a department
permit.

ENGL 4882  Professional and Technical Writing Internship  
1-3 s.h.
Supervised work-and-learning experiences in professional communication
under the direction of a faculty member and an employee of a participating
firm. Internship encompasses 10 to 20 hours of student time each week.
Enrollment is contingent upon the availability of internships. Students are
selected on the basis of their current resume, brief statement of interest,
and faculty recommendations. May be repeated with the approval of the
department chairperson.
Prereq.: ENGL 3742 or ENGL 3743 with grade "C" or better.
ENGL 4899 Professional and Technical Writing Senior Project 3 s.h.  
Capstone experience for the Professional Writing and Editing major. Individualized research, analysis, development, and oral presentation of a project that incorporates audience-appropriate writing, design, and/or editing in a usable high-quality product. Taken during the students final undergraduate year.  
Prereq.: ENGL 3743 with grade "C" or better.  
Gen Ed: Capstone.

**Bachelor of Arts in English**

The English literature major requires 42 semester hours. This curriculum sheet includes general education requirements and the minor. You'll take electives to complete the minimum 120 sh for graduation.

### Course Title and Semester Hours

#### First Year Requirement - Student Success Seminar

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<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
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<tbody>
<tr>
<td>YSU 1500</td>
<td>Success Seminar</td>
<td>1-2</td>
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<tr>
<td>or SS 1500</td>
<td>Strong Start Success Seminar</td>
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<tr>
<td>or HONR 1500</td>
<td>Intro to Honors</td>
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#### General Education Requirements

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<thead>
<tr>
<th>COURSE</th>
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<th>S.H.</th>
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<tbody>
<tr>
<td>ENGL 1550</td>
<td>Writing 1</td>
<td>3-4</td>
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<tr>
<td>or ENGL 1549</td>
<td>Writing 1 with Support</td>
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<tr>
<td>ENGL 1551</td>
<td>Writing 2</td>
<td>3</td>
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<tr>
<td>CMST 1545</td>
<td>Communication Foundations</td>
<td>3</td>
</tr>
<tr>
<td>Arts and Humanities (6 s.h.)</td>
<td></td>
<td>6</td>
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<tr>
<td>Natural Sciences (2 courses, 1 with lab) (6-7 s.h.)</td>
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<td>6-7</td>
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<tr>
<td>Social Science (6 s.h.)</td>
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<tr>
<td>Social and Personal Awareness (6 s.h.)</td>
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#### Foreign Language Requirement

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<tr>
<th>COURSE</th>
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<th>S.H.</th>
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<tr>
<td>FNLG 1550</td>
<td>Elementary Foreign Language</td>
<td>4</td>
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<tr>
<td>FNLG 2600</td>
<td>Intermediate Foreign Language</td>
<td>4</td>
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</tbody>
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#### Multicultural Studies

Choose one: ENGL 2617 (Women in Literature), 2618 (American Literature and Diversity), 2620 (African Literature), 3732 (Images of Women), 3790 (Sel. Topics in Multicultural Studies), 4850 (Sociolinguistics), or 4871 (Black Experience in American Literature)

#### Major Requirements

<table>
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<tr>
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<tbody>
<tr>
<td>ENGL 3700</td>
<td>Literary Study</td>
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<tr>
<td>ENGL 3706</td>
<td>Introduction to Literary Theory</td>
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<tr>
<td>ENGL 3710</td>
<td>British Literature 1</td>
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<tr>
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<td>ENGL 3712</td>
<td>American Literature 1</td>
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<td>ENGL 3713</td>
<td>American Literature 2</td>
<td>3</td>
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<tr>
<td>ENGL 4890</td>
<td>Senior Seminar (Capstone)</td>
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#### Language Studies

<table>
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<tbody>
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<td>ENGL 3755</td>
<td>Principles of Linguistic Study</td>
<td>3</td>
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<tr>
<td>or ENGL 3577</td>
<td>Development of the English Language</td>
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</table>

#### British Literature Studies

Select one of the following:

- ENGL 4830 Major Figures in British Literature  
- ENGL 4831 British Genres, Circles, and Movements  
- ENGL 4860 The Medieval World  
- ENGL 4881 Shakespeare and His World  
- ENGL 4882 The English Renaissance  
- ENGL 4886 Restoration and Eighteenth Century British Literature  
- ENGL 4887 The Romantic Period  
- ENGL 4892 Nineteenth Century British Literature Studies  
- or ENGL 4895 Early Twentieth Century British Studies  
- or ENGL 4896 British Literature from World War II to the Present

### American Literature Studies

Select one of the following:

- ENGL 3770 American Literature in Historical Perspective  
- or ENGL 3780 American Genres  
- or ENGL 4862 Themes in American Literature  
- or ENGL 4864 American Literary Conversations  
- or ENGL 4871 The Black Experience in American Literature

Select one additional British or American Literatures Studies Course from the above list (The course must cover a period before 1900.)

#### Advanced Writing

Select one of the following:

- JOUR 3716 Magazine Publishing  
- or JOUR 3717 Editorial and Opinion Writing  
- or JOUR 3721 Journalism Workshop  
- or ENGL 3740 Advanced Writing  
- or ENGL 3741 Advanced Writing for Teachers  
- or ENGL 3743 Professional and Technical Writing  
- or ENGL 3744 Proposal and Report Writing  
- or ENGL 3746 Fiction Writing Workshop  
- or ENGL 3747 Poetry Writing Workshop  
- or ENGL 3748 Screenwriting

#### Popular Culture Studies

Select one of the following:

- ENGL 3750 Language and Culture  
- or ENGL 3765 Film Genres  
- or ENGL 3737 Popular Culture Studies  
- or ENGL 4865 Selected Topics in Film

### Minor

18 s.h.

### Electives - to meet 120 hours

18 s.h.

### Total Semester Hours

120-123

This plan is a road-map to graduation, but you have many options in how you manage your schedule. Speak to a department advisor for help creating a plan that will help you to achieve your professional goals (call 330-941-3414 or email the literature coordinator listed on the department website).

#### Year 1

**Spring**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>Title</th>
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<tr>
<td>YSU 1500</td>
<td>Success Seminar</td>
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<td>NS XXXX</td>
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<td>3</td>
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<tr>
<td>AH XXXX</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>ENGL 1550</td>
<td>Writing 1</td>
<td>3-4</td>
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<tr>
<td>or ENGL 1549</td>
<td>or Writing 1 with Support</td>
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<tr>
<td>MATH 2623</td>
<td>Quantitative Reasoning</td>
<td>3</td>
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<tr>
<td>FNLG 1550</td>
<td>Elementary Foreign Language</td>
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</table>

#### Semester Hours

16

**Fall**

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<tr>
<th>COURSE</th>
<th>Title</th>
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<td>YSU 1500</td>
<td>Success Seminar</td>
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<tr>
<td>NS XXXX</td>
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<td>3</td>
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<tr>
<td>AH XXXX</td>
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<td>3</td>
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<tr>
<td>ENGL 1550</td>
<td>Writing 1</td>
<td>3-4</td>
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<tr>
<td>or ENGL 1549</td>
<td>or Writing 1 with Support</td>
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<td>MATH 2623</td>
<td>Quantitative Reasoning</td>
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<tr>
<td>FNLG 1550</td>
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#### Semester Hours

17-18

**Year 2

**Spring**

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<td>ENGL 3710</td>
<td>British Literature 1</td>
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</table>
Bachelor of Arts in Professional and Technical Writing (PTW)

<table>
<thead>
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<td>ENGL 1550</td>
<td>General Education Requirements</td>
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<tr>
<td>YSU 1500</td>
<td>UNIVERSITY REQUIREMENT - STUDENT SUCCESS</td>
<td>1-2</td>
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<tr>
<td>or SS 1500</td>
<td>Success Seminar</td>
<td>1-2</td>
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<tr>
<td>or HONR 1500</td>
<td>Strong Start Success Seminar</td>
<td>1-2</td>
</tr>
<tr>
<td>ENGL 1550</td>
<td>Intro to Honors</td>
<td>1-2</td>
</tr>
</tbody>
</table>

Learning Outcomes

The Department of English and World Languages has established the following learning outcomes for students completing the English major:

- English majors will deploy varied strategies for engaging with literature on the levels of words, appropriate parts of texts, whole texts, contexts, and criticism.
- English majors will be able to situate texts in the appropriate literary, historical, and cultural contexts.
- English majors will be able to analyze how the production and reception of language and literature are influenced by differences of form, culture, and identity.
- English majors will effectively present and discuss ideas about literature and language in a manner that is appropriate for the situation.

Bachelor of Arts in Professional and Technical Writing (PTW)

Overview

The PTW program is designed to help you learn to write, edit, and design electronic and paper documents for businesses, organizations, and institutions. Successful PTW majors demonstrate many kinds of knowledge and skills valued in the field. As a PTW major, you'll analyze existing works—from web sites and manuals to policies and proposals—as well as produce your own original materials for your professional portfolio. Specifically, you will

- learn to produce clear, effective, well-edited writing that serves the needs and interests of various audiences;
- learn to adapt to working environments that are changing rapidly—especially in terms of information technology;
- develop a specialty in a specific field or type of working environment in which you'd like to put your PTW knowledge and skills to use.

Majors in PTW enjoy successful careers as writers, editors, and document developers. Our graduates have gotten work as professional and technical writers at Ohio companies like Radcom and Rockwell Automation, as grant writers at regional nonprofits, as marketing and public relations specialists around the nation, and as teachers, trainers and consultants in the field. Many have continued their studies in graduate programs as well.

A major in professional and technical writing requires 63 semester hours, distributed as follows:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
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</thead>
<tbody>
<tr>
<td>ENGL 1550</td>
<td>Writing 1</td>
<td>3-4</td>
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</tbody>
</table>

1 For the upper-division British Literature requirement, pick one from this list: 4830 (Major Figures in British Literature), 4831 (British Genres, Circles, and Movements), 4860 (The Medieval World), Shakespeare and His World), 4882 (The English Renaissance), 4886 (Restoration and Eighteenth Century British Literature), 4887 (The Romantic Period), 4892 (Nineteenth Century British Literature Studies), 4895 (Early 20th Century British Studies), or 4896 (British Literature--WW II to the Present).

2 For the upper-division American Literature requirement, pick one from the following list: 3770 (American Literature in Historical Perspective), 3780 (American Genres), 4862 (Themes in American Literature), 4864 (American Literary Conversations), 4871 (The Black Experience in American Literature).
<table>
<thead>
<tr>
<th>Courses</th>
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<tbody>
<tr>
<td>or ENGL 1549 Writing 1 with Support</td>
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<tr>
<td>ENGL 1550 Writing 1</td>
<td>3</td>
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<tr>
<td>CMST 1545 Communication Foundations</td>
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<tr>
<td>Mathematics Requirement</td>
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<tr>
<td>MATH 2623 Quantitative Reasoning</td>
<td>3</td>
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<tr>
<td>Arts and Humanities (6 s.h.)</td>
<td>6</td>
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<tr>
<td>Natural Sciences (2 courses, 1 with lab) (6-7 s.h.)</td>
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<tr>
<td>Social Science (6 s.h.)</td>
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<tr>
<td>Social and Personal Awareness (6 s.h.)</td>
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<tr>
<td>Foreign Language Requirement</td>
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<tr>
<td>FNGL 1550 Elementary Foreign Language</td>
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<tr>
<td>FNGL 2600 Intermediate Foreign Language</td>
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<td>I. The Core (27 s.h.)</td>
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<tr>
<td>ENGL 3740 Advanced Writing</td>
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<tr>
<td>ENGL 3743 Professional and Technical Writing</td>
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<tr>
<td>ENGL 3744 Proposal and Report Writing</td>
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<tr>
<td>ENGL 3745 Writing for Online Environments</td>
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<tr>
<td>ENGL 3751 Readings in Professional and Technical Writing</td>
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<tr>
<td>ENGL 3755 Principles of Linguistic Study</td>
<td>3</td>
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<tr>
<td>ENGL 4843 Advanced Professional and Technical Writing</td>
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<td>ENGL 4849 Professional and Technical Editing</td>
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</tr>
<tr>
<td>ENGL 4899 Professional and Technical Writing Senior Project</td>
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<tr>
<td>II. Writing and Language Study (12 s.h.)</td>
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<tr>
<td>Take no more than three courses in any one category. Other courses may be substituted with approval.</td>
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<tr>
<td>Internship (1-3 s.h.)</td>
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<tr>
<td>ENGL 4898 Professional and Technical Writing Internship</td>
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<td>Linguistics</td>
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<td>ENGL 4850 Sociolinguistics</td>
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<td>ENGL 4855 Advanced Linguistics</td>
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<td>ENGL 4858 English Grammar</td>
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<td>ENGL 4859 Selected Topics in Discourse</td>
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<td>Creative Writing</td>
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<td>ENGL 3746 Fiction Writing Workshop</td>
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<tr>
<td>ENGL 3747 Poetry Writing Workshop</td>
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<tr>
<td>ENGL 3748 Screenwriting</td>
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<td>Journalism</td>
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<td>JOUR 2622</td>
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<td>JOUR 3716 Magazine Publishing</td>
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<td>JOUR 3717 Editorial and Opinion Writing</td>
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<tr>
<td>JOUR 3760 News Reporting 2</td>
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<tr>
<td>III. Critical Reading (6 s.h.)</td>
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<td>Take any two literature courses in the English department.</td>
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<tr>
<td>Please note: 2600-level courses may also be counted for GER credit</td>
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<tr>
<td>IV. Professional Area (18 s.h.)</td>
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<tr>
<td>Choose one of the five options listed below. 9 s.h. must be at the 3700-level or higher. Appropriate coursework can be found in the departmental programs listed for each area.</td>
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<tr>
<td>Option 1: Publication Design</td>
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<td>Option 2: Electronic Document Development</td>
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<td>Option 3: Technical/Scientific Writing</td>
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<td>Option 4: Organizational Writing</td>
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<td>Option 5: Independent Professional Area</td>
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<td>Year 1</td>
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<tr>
<td>YSU 1500 Success Seminar</td>
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<tr>
<td>ENGL 1550 or ENGL 1549 Writing 1 or Writing 1 with Support</td>
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<tr>
<td>MATH 2623 Quantitative Reasoning</td>
<td>3</td>
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<tr>
<td>Arts &amp; Humanities</td>
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<tr>
<td>Natural Sciences</td>
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<td>Foreign Language 1550</td>
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<td>Social Sciences</td>
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<td>Social &amp; Personal Awareness</td>
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<td>ENGL 1551 Writing 2</td>
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<td>CMST 1545 Communication Foundations</td>
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<td>ENGL 3743 Professional and Technical Writing</td>
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<td>ENGL 3744 Proposal and Report Writing</td>
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<td>ENGL 3745 Writing for Online Environments</td>
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<tr>
<td>ENGL 3751 Readings in Professional and Technical Writing</td>
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<td>ENGL 4843 Advanced Professional and Technical Writing</td>
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<tr>
<td>PTW Prof Area crs. (4 of 6)</td>
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<td>ENGL 3755 Principles of Linguistic Study</td>
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<td>ENGL 4849 Professional and Technical Editing</td>
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<td>Semester Hours</td>
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</table>
Minor in British and American Literature

Learning Outcomes
The English Department has established the following learning outcomes for students completing the professional and technical writing major:

- PTW majors will define, state, and achieve a specific purpose and target audience, recognizing and adjusting for budgetary and timeline constraints.
- PTW majors will create and implement appropriate formats and designs for specific audiences and purposes.
- PTW majors will use a problem-solving approach and a variety of resources to investigate a problem, acquire and assess information, and organize it effectively.
- PTW majors will design documents professionally, using appropriate technological resources, software and hardware, as well as appropriate elements of design.
- PTW majors will evaluate others' writing, accept and implement the recommendations of others in revision and editing. They will edit appropriately, using conventional grammar, spelling, and diction, and they will apply the appropriate style guide.

Select one upper-division British Literature course from the following:
- ENGL 3710 British Literature 1
- or ENGL 3711 British Literature 2
- ENGL 3712 American Literature 1
- or ENGL 3713 American Literature 2

Select one upper-division American Literature course from the following:
- ENGL 3780 American Genres
- ENGL 4862 Themes in American Literature
- ENGL 4864 American Literary Conversations
- ENGL 4871 The Black Experience in American Literature

Total Semester Hours 18

Minor in Creative Writing

Take six of the following courses. Note that ENGL 2646 (Fiction) and 2647 (Poetry) are prerequisites for the upper-division workshops in fiction and poetry.

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<tr>
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<th>TITLE</th>
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<tbody>
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<td>ENGL 2646</td>
<td>Introduction to Fiction Writing</td>
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<td>ENGL 2647</td>
<td>Introduction to Poetry Writing</td>
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<tr>
<td>ENGL 3740</td>
<td>Advanced Writing</td>
<td>3</td>
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<tr>
<td>ENGL 3746</td>
<td>Fiction Writing Workshop</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 3747</td>
<td>Poetry Writing Workshop</td>
<td>3</td>
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<tr>
<td>ENGL 3748</td>
<td>Screenwriting</td>
<td>3</td>
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<tr>
<td>ENGL 3749</td>
<td>Writing the Youth Novel</td>
<td>3</td>
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</table>

Total Semester Hours 18

Minor in English Studies

<table>
<thead>
<tr>
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<th>TITLE</th>
<th>S.H.</th>
</tr>
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<tbody>
<tr>
<td>ENGL 3700</td>
<td>Literary Study</td>
<td>3</td>
</tr>
</tbody>
</table>

Select one of the following literature survey courses:
- ENGL 3770 American Literature in Historical Perspective
- ENGL 3780 American Genres
- ENGL 4862 Themes in American Literature
- ENGL 4864 American Literary Conversations
- ENGL 4871 The Black Experience in American Literature

Select one upper division American Literature OR upper division British Literature from the following:

<table>
<thead>
<tr>
<th>American Literature Courses</th>
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<tbody>
<tr>
<td>ENGL 3770 American Literature in Historical Perspective</td>
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<tr>
<td>ENGL 3780 American Genres</td>
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<td></td>
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<tr>
<td>ENGL 4862 Themes in American Literature</td>
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<tr>
<td>ENGL 4864 American Literary Conversations</td>
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<tr>
<td>ENGL 4871 The Black Experience in American Literature</td>
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</table>

<table>
<thead>
<tr>
<th>British Literature Courses</th>
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</thead>
<tbody>
<tr>
<td>ENGL 4830 Major Figures in British Literature</td>
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<tr>
<td>ENGL 4831 British Genres, Circles, and Movements</td>
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<td>ENGL 4860 The Medieval World</td>
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<td>ENGL 4881 Shakespeare and His World</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 4882 The English Renaissance</td>
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<tr>
<td>ENGL 4886 Restoration and Eighteenth Century British Literature</td>
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<td>ENGL 4887 The Romantic Period</td>
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<td>ENGL 4892 Nineteenth Century British Literature Studies</td>
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<td>ENGL 4895 Early Twentieth Century British Studies</td>
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<td>ENGL 4896 British Literature from World War II to the Present</td>
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Select one other literature course from the following:
- ENGL 2610 World Literature
- ENGL 2617 Women in Literature
- ENGL 2618 American Literature and Diversity
- ENGL 2620 African Literature
Minor in Linguistics

The minor in linguistics requires completion of a minimum of 18 semester hours including ENGL 3755 Principles of Linguistic Study. Contact Nicole Pettitt, Linguistic Program Director, for further details.

COURSE | TITLE | S.H.
--- | --- | ---
ENGL 3755 | Principles of Linguistic Study | 3

Required Courses

Group I

Select at least two courses:

| ENGL 3750 | Language and Culture | 3
| ENGL 3757 | Development of the English Language | 3
| ENGL 4850 | Sociolinguistics | 3
| ENGL 4855 | Advanced Linguistics | 3
| ENGL 4858 | English Grammar | 3

Additional Coursework for Groups I and II

Select at least 9 s.h. from the following:

- ENGL 3703 Literature for Young Children
- ENGL 3704 Literature for Middle School Readers
- ENGL 3705 Young Adult Literature
- ENGL 3738 Selected Topics in World Literature
- ENGL 3765 Film Genres
- ENGL 4865 Selected Topics in Film

Select two additional English Studies courses – one course from any two of the following groups:

Group 1: Language, Writing, and Culture

- ENGL 2651 Introduction to Language
- ENGL 3755 Principles of Linguistic Study
- ENGL 3740 Advanced Writing
- ENGL 3790 Selected Topics in Multicultural Studies

Group 2: Journalism

- JOUR 2622
- JOUR 2626 American Journalism
- JOUR 3716 Magazine Publishing
- JOUR 3717 Editorial and Opinion Writing
- JOUR 3723 Advanced Journalism Editing and Design
- JOUR 4824 Press Law and Ethics

Group 3: Creating Writing

- ENGL 2646 Introduction to Fiction Writing
- ENGL 2647 Introduction to Poetry Writing
- ENGL 3748 Screenwriting
- ENGL 3746 Fiction Writing Workshop
- ENGL 3747 Poetry Writing Workshop

Group 4: Technical and Professional Communication

- ENGL 3743 Professional and Technical Writing
- ENGL 3744 Proposal and Report Writing
- ENGL 4849 Professional and Technical Editing

Total Semester Hours: 18

World Languages and Cultures

Programs in World Languages

Students can major in Italian and Spanish. Students learn to read and write, speak and listen; they also are introduced to how the language works and functions linguistically. Study also includes an introduction to the literatures and cultures of Italian- and Spanish-speaking peoples and regions.

Specifically, students will develop a cultural understanding and appreciation of the history and of those areas in which the target language is (or was) spoken. Spanish and Italian majors will be able to read and understand a variety of materials written in the target language. They will be able to understand the target language when spoken in a variety of contexts. In addition, majors will be able to carry on a conversation, deliver a speech, and compose in the target language.

Minors are also achievable in Spanish and Italian as well as in French. Coursework is also offered in American Sign Language, Arabic, Chinese, German, Latin, and Ancient Greek. Students who wish to meet their General Education Requirement in Foreign Language may do so in any of those languages.

Learning Outcomes

The learning outcomes for all modern language courses, the level of expectation depending on the level of the course, are as follows:

- Cultural Understanding: The student will develop an understanding and appreciation of the history and culture of those areas in which the target language is (or was) spoken.
- Reading Comprehension: The student will be able to read and understand a variety of materials written in the target language. These materials may include but are not limited to: novels, plays, poetry, newspaper and magazine articles, and private correspondence (e.g., business communications).
- Listening Comprehension: The student will be able to understand the target language when spoken in a variety of contexts. These contexts may include but are not limited to conversation with another individual or individuals, formal lectures, song and film.
- Oral Expression: The student will be able to carry on a conversation and deliver a speech in the target language.
- Written Expression: The student will be able to compose in the target language a variety of written documents. These documents may include but are not limited to formal and casual correspondence, essays and creative works.

American Sign Language

ASL 1550 Elementary American Sign Language 1 2 s.h.

Introduction to the fundamentals of American Sign Language (ASL), including vocabulary, syntax, and grammatical non-manual signals. Introduction to the history and culture of the Deaf Community. Grading is ABC/NC.
**Foreign Languages**

**FNLG 1550  Elementary Foreign Language  4 s.h.**

Intensive training in understanding, speaking, reading, and writing a foreign language not regularly offered. Geography and daily life, as well as appreciation of the culture of its speakers, are studied. Assignments in the Language Learning and Resource Center (LLRC). Grading is ABC/NC.

**FNLG 2600  Intermediate Foreign Language  4 s.h.**

Intensive training in understanding, speaking, reading, and writing a foreign language not regularly offered. Geography and daily life, as well as appreciation of the culture of the speakers, are studied. Assignments in the Language Learning and Resource Center (LLRC).

**FNLG 2601  Advanced Intermediate Foreign Language  3 s.h.**

Intensive training in understanding, speaking, reading, and writing a foreign language not regularly offered. Geography and daily life, as well as appreciation of the cultures of speakers of the language, are studied.

Prereq.: FNLG 2600 in the same language.

* Currently only FNLG 1550 and FNLG 2600 are regularly offered.

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**Chinese**

CHIN 1550  Elementary Chinese  4 s.h.

Intensive training in understanding, speaking, reading, and writing Chinese. Geography and daily life, as well as appreciation of the culture of Chinese speakers, are studied. Assignments in the Language Learning and Resource Center (LLRC). Grading is ABC/NC.

CHIN 2600  Intermediate Chinese  4 s.h.

Continuation of CHIN 1550 with intensive training in understanding, speaking, reading, and writing Chinese. Geography and daily life, as well as appreciation of the culture of Chinese speakers, are studied. Assignments in the Language Learning and Resource Center (LLRC).

Prereq.: CHIN 1550.

CHIN 2605  Advanced Intermediate Chinese 1  3 s.h.

A continuation of CHIN 2600 with intensive training in understanding, speaking, reading, and writing Chinese. Geography and daily life, as well as appreciation of the culture of Chinese speakers, are studied.

Prereq.: CHIN 2600 or placement test.

CHIN 2606  Advanced Intermediate Chinese 2  3 s.h.

A continuation of CHIN 2605 with intensive training in understanding, speaking, reading, and writing Chinese.

Prereq.: CHIN 2605.

CHIN 3701  Advanced Chinese 1  3 s.h.

A continuation of CHIN 2606 with intensive training in understanding, speaking, reading, and writing Chinese.

Prereq.: CHIN 2606.

CHIN 3702  Advanced Chinese 2  3 s.h.

A continuation of CHIN 3701 with intensive training in understanding, speaking, reading, and writing Chinese.

Prereq.: CHIN 3701.

CHIN 3799  Study Abroad in Chinese  1-15 s.h.

An individually-arranged program of foreign study in the Chinese language. Programs can be of two general types: (1) trips or residential programs sponsored by consortial universities, and (2) independent academic coursework through institutions with which YSU does not have a consortial agreement. A written statement detailing the student’s academic plan must be approved by the Chair of Foreign Languages and the Dean of CLASS prior to the trip. May be repeated up to a total of 15 s.h., if specific course content changes. Note: study abroad generally requires about one year’s advance planning.

Prereq.: Sophomore abroad generally requires about one year’s advance planning.

* Currently only CHIN 1550 and CHIN 2600 are regularly offered.

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**Arabic**

**ARBC 1550  Elementary Arabic  4 s.h.**

Intensive training in understanding, speaking, reading, and writing Arabic. Geography and daily life, as well as appreciation of the culture of Arabic speakers, are studied. Assignments in the Language Learning and Resource Center (LLRC). Grading is ABC/NC.

**ARBC 2600  Intermediate Arabic  4 s.h.**

A continuation of ARBC 1550 with intensive training in understanding, speaking, reading, and writing Arabic. Geography and daily life, as well as appreciation of the culture of Arabic speakers, are studied. Assignments in the Language Learning and Resource Center (LLRC).

Prereq.: ARBC 1550.

**ARBC 2605  Advanced Intermediate Arabic 1  3 s.h.**

A continuation of ARBC 2600 with intensive training in understanding, speaking, reading, and writing Arabic. Geography and daily life, as well as appreciation of the culture of Arabic speakers, are studied.

Prereq.: ARBC 2600.

**ARBC 2606  Advanced Intermediate Arabic 2  3 s.h.**

A continuation of ARBC 2605 with intensive training in understanding, speaking, reading, and writing Arabic.

Prereq.: ARBC 2605.

**ARBC 3701  Advanced Arabic 1  3 s.h.**

A continuation of ARBC 2606 with intensive training in understanding, speaking, reading, and writing Arabic.

Prereq.: ARBC 2606.

**ARBC 3702  Advanced Arabic 2  3 s.h.**

A continuation of ARBC 3701 with intensive training in understanding, speaking, reading, and writing Arabic.

Prereq.: ARBC 3701.

**ARBC 3799  Study Abroad in Arabic  1-15 s.h.**

An individually-arranged program of foreign study in the Arabic language. Programs can be of two general types: (1) trips or residential programs sponsored by consortial universities, and (2) independent academic coursework through institutions with which YSU does not have a consortial agreement. A written statement detailing the student’s academic plan must be approved by the Chair of Foreign Languages and the Dean of CLASS prior to the trip. May be repeated up to a total of 15 s.h., if specific course content changes. Note: study abroad generally requires about one year’s advance planning.

Prereq.: Sophomore abroad generally requires about one year’s advance planning.

* Currently only ARBC 1550 and ARBC 2600 are regularly offered.
French

FRNC 1550 Elementary French 4 s.h.
Intensive training in understanding, speaking, reading, and writing French. Geography and daily life, as well as appreciation of the culture of its speakers, are studied. Assignments in the Language Learning and Resource Center (LLRC). Grading is ABC/NC.

FRNC 2600 Intermediate French 4 s.h.
Intensive training in understanding, speaking, reading, and writing French; knowledge of the natural and cultural features of French-speaking countries and regions. Assignments in the Language Learning and Resource Center (LLRC).
Prereq.: Placement test or FRNC 1550.

FRNC 2605 Advanced Intermediate French 3 s.h.
Advanced training in understanding, speaking, reading, and writing French; knowledge of the natural and cultural features of French-speaking countries and regions. Assignments in the Language Learning and Resource Center (LLRC).
Prereq.: Placement test or FRNC 2600.

FRNC 2606 Intensive French Review 3 s.h.
Intensive review of basic French speaking and writing language skills. Grammatical structures and vocabulary in context.
Prereq.: Placement test or FRNC 2600.

FRNC 3701 Service Learning in French 1-2 s.h.
Using the French language to engage in community service or an internship. Completion of a journal written in French and detailing the experience is required. May be repeated up to 4 s.h.
Prereq.: Approval of Department Chair, and FRNC 2600 or placement test.

FRNC 3710 Applied French Phonetics 3 s.h.
A systematic study of French phonetics to correct defects in pronunciation and intonation and give students a better understanding of the differences between the French and English sound systems.
Prereq.: FRNC 2605 and FRNC 2606.

FRNC 3716 Advanced French Grammar and Composition 3 s.h.
A systematic study of French language morphology, sentence structure, and usage applied to a variety of written discourse styles. Contrast with English discourse styles and effective grammatical use.
Prereq.: FRNC 2605 and FRNC 2606.

FRNC 3717 Advanced French Conversation 3 s.h.
Development of oral expression through discussion of current topics in the context of French and Francophone culture, politics, and economics. Expansion of vocabulary.
Prereq.: FRNC 2605 and FRNC 2606.

FRNC 3720 Literature and Culture: France 3 s.h.
A study of major works of French literature through its history, placed in the cultural context which helped produce them.
Prereq.: FRNC 2605 and FRNC 2606.

FRNC 3725 Francophone Literature and Culture 3 s.h.
A study of major works representative of Francophone literature in their cultural context.
Prereq.: FRNC 2605 and FRNC 2606.

FRNC 3736 Introduction to French Linguistics 3 s.h.
Examination of basic concepts and issues of modern French linguistic theory. Emphasis is on sociolinguistics with attention also to phonology, morphology, syntax and pragmatics.
Prereq.: FRNC 2605 and FRNC 2606.

FRNC 3740 French for Business and Communication 3 s.h.
Development of oral and written communication in business and other practical situations. Business practices in French-speaking countries.
Prereq.: FRNC 2605 and FRNC 2606.

FRNC 3750 French Civilization and Culture 3 s.h.
A study of contemporary French civilization and culture, focusing on what the French consider typical of their character, as exemplified by their traditions, magazines, films, and heroes. Readings and class work in French.
Prereq.: FRNC 2605 and FRNC 2606.
FRNC 3780  French Composition and Conversation Review  3 s.h.
Review course emphasizing impromptu conversations and in-class essay writing. Intended for students who need additional coursework to achieve the level of Advanced Low on the ACTFL Oral Proficiency Interview and/or the ACTFL Writing Proficiency Test. May not be counted toward the major. Grading is CR/NC.
Prereq.: 15 s.h. in French at the 3700 level or above and permission of Chair.

FRNC 3799  Study Abroad in French  1-15 s.h.
An individually-arranged program of foreign study in the French language. Programs can be of two general types: (1) trips or residential programs sponsored by consortial universities, and (2) independent academic coursework through institutions with which YSU does not have a consortial agreement. A written statement detailing the student's academic plan must be approved by a member of the French faculty, the chair of Foreign Languages and the dean of CLASS prior to the trip. Credit toward fulfillment of requirements for the French major will be determined by the chair of Foreign Languages and not the French faculty. May be repeated up to a total of 15 s.h., if specific course content changes. Note: study abroad generally requires about one year's advance planning.
Prereq.: Sophomore status and approval of the chair of Foreign Languages.

FRNC 4885  French Conversation and Composition Capstone  3 s.h.
Capstone course emphasizing impromptu conversations and in-class essay writing. Students must achieve a level of Advanced Low on both the ACTFL Oral Proficiency Interview and the ACTFL Writing Proficiency Test.
Prereq.: 15 s.h. in French at the 3700 level or above and permission of Chair.

FRNC 4886  French Composition and Conversation Capstone  3 s.h.
Course emphasizing impromptu conversations and in-class essay writing. Student must achieve a level of Intermediate High on both the ACTFL Oral Proficiency Interview and the ACTFL Writing Proficiency Test.
Prereq.: 15 s.h. in French at the 3700 level or above and permission of Chair.

German

GRMN 1550  Elementary German  4 s.h.
Intensive training in understanding, speaking, reading, and writing German. Geography and daily life, as well as appreciation of the culture of its speakers, are studied. Students should achieve an intermediate-low level of proficiency. Assignments in the Language Learning and Resource Center (LLRC). Grading is ABC/NC.

GRMN 2600  Intermediate  4 s.h.
Intensive training in understanding, speaking, reading, and writing German; knowledge of geography and daily life as well as appreciation of the cultures of German speakers. Students should achieve an intermediate-mid level of proficiency. Assignments in the LLRC.
Prereq.: Placement test or GRMN 1550.

GRMN 2605  Advanced Intermediate  3 s.h.
Intensive training in understanding, speaking, reading, and writing German; knowledge of geography and daily life as well as appreciation of the cultures of German speakers. By the end of the course the students should achieve an intermediate-high level of proficiency. Assignments in the LLRC.
Prereq.: Placement test or GRMN 2600.

GRMN 6901  Special Topics in German  3 s.h.
Arranged course for graduate students only.
Prereq.: Two 4800-level courses in German with grade of "B" or better.

Greek

GRK 1550  Elementary Ancient Greek  4 s.h.
Introduction to Ancient Greek with emphasis on those aspects of grammar most essential for developing the ability to read Greek. Translation of simple Ancient Greek texts into English. Grading is ABC/NC.

GRK 2600  Intermediate Ancient Greek  4 s.h.
Continuation of GRK 1550 with emphasis on more complex aspects of Ancient Greek grammar. Translation of more advanced Ancient Greek texts, including some authentic passages.
Prereq.: Placement test or GRK 1550.

GRK 2603  Directed Reading in Ancient Greek 1  3 s.h.
Reading of selections from an Ancient Greek author or genre with emphasis on translation. Review of Ancient Greek grammar and introduction of some advanced grammatical constructions not covered in Ancient Greek 1550 or 2600. May be repeated once if topic is different.
Prereq.: Permission of Chair and either placement test or GRK 2600.

GRK 3753  Directed Reading in Ancient Greek 2  3 s.h.
Reading of selections from an Ancient Greek author or genre with emphasis on translation and interpretation of text. Review of Ancient Greek grammar, introduction of relevant modern scholarship, and writing of evaluative essays. May be repeated once if topic is different.
Prereq.: GRK 2603 and permission of Chair.

GRK 4883  Directed Reading in Ancient Greek 3  3 s.h.
Reading of selections from an Ancient Greek author or genre with emphasis on translation and interpretation of text. Review of Ancient Greek grammar. Writing of a research paper. May be repeated once if topic is different.
Prereq.: GRK 3753 and permission of Chair.

Hebrew*

HBRW 1550  Elementary Hebrew  4 s.h.
Beginning training in understanding, speaking, reading, and writing Hebrew. Geography and daily life, as well as appreciation of the culture of its speakers, are studied. Assignments in the Language Learning and Resource Center (LLRC). Grading is ABC/NC.

HBRW 2600  Intermediate Hebrew  4 s.h.
Intensive training in understanding, speaking, reading, and writing Hebrew; knowledge of geography and daily life as well as appreciation of the culture of Hebrew speakers. Assignments in the Language Learning and Resource Center (LLRC).
Prereq.: Placement test or HBRW 1550.

HBRW 2605  Advanced Intermediate Hebrew  3 s.h.
Reading and discussion in Hebrew of selections from the Hebrew Scripture.
Prereq.: Placement test or HBRW 2600.

HBRW 3706  Readings in Hebrew Scripture  3 s.h.
Reading and discussion in Hebrew of selections from the Hebrew Scriptures. May be repeated once if the texts studied are different.
Prereq.: HBRW 2605.

HBRW 3799  Study Abroad in Hebrew  1-15 s.h.
An individually-arranged program of foreign study in the Hebrew language. Programs can be of two general types: (1) trips or residential programs sponsored by consortial universities, and (2) independent academic coursework through institutions with which YSU does not have a consortial agreement. A written statement detailing the student's academic plan must be approved by a member of the Hebrew faculty, the chair of Foreign Languages and the dean of CLASS prior to the trip. Credit toward fulfillment of requirements for the French major will be determined by the chair of Foreign Languages and not the French faculty. May be repeated once if specific course content changes. Note: study abroad generally requires about one year's advance planning.
Prereq.: Sophomore status and approval of the chair of Foreign Languages.

* Currently only HBRW 1550 and HBRW 2600 are regularly offered.

Italian

ITAL 1505  Elementary Italian  1  4 s.h.
Intensive training in understanding, speaking, reading, and writing Italian. Geography and daily life, as well as appreciation of the culture of its speakers, are studied. Assignments in the Language Learning and Resource Center (LLRC). Grading is ABC/NC.
ITAL 1506  Elementary Italian 2  4 s.h.
Intensive training in understanding, speaking, reading, and writing Italian; knowledge of geography and daily life as well as appreciation of the cultures of Italian speakers. Assignments in the Language Learning and Resource Center (LLRC).
Prereq.: Placement test or ITAL 1505 or ITAL 1506.

ITAL 1550  Elementary Italian 4 s.h.
Intensive training in understanding, speaking, reading, and writing Italian. Geography and daily life, as well as appreciation of the culture of its speakers, are studied. Assignments in the Language Learning and Resource Center (LLRC). Grading is ABC/NC.

ITAL 2600  Intermediate Italian 4 s.h.
Intensive training in understanding, speaking, reading, and writing Italian; knowledge of geography and daily life as well as appreciation of the cultures of Italian speakers. Assignments in the Language Learning and Resource Center (LLRC).
Prereq.: Placement test or ITAL 1500.

ITAL 2605  Advanced Intermediate Italian 4 s.h.
Intensive training in understanding, speaking, reading and writing Italian; knowledge of geography and daily life as well as appreciation of the cultures of Italian speakers.
Prereq.: Placement test or ITAL 2600.

ITAL 2607  Intermediate Italian 1 4 s.h.
Intensive training in understanding, speaking, reading and writing Italian; knowledge of geography and daily life as well as appreciation of the cultures of Italian speakers.
Prereq.: Placement test or ITAL 1506 or ITAL 2600.

ITAL 2608  Intermediate Italian 2 4 s.h.
Intensive training in understanding, speaking, reading and writing Italian; knowledge of geography and daily life as well as appreciation of the cultures of Italian speakers.
Prereq.: ITAL 1506 or ITAL 2600.

ITAL 2610  Introduction to Italian Film 1 s.h.
Analysis, written and oral, of Italian films presented in conjunction with FN LG 2610. Corequisite FN LG 2610.
Prereq.: ITAL 1506 or ITAL 2600.

ITAL 3701  Service Learning in Italian 2 s.h.
Using the Italian language to engage in community service or an internship. Completion of a journal written in Italian and detailing the experience is required. May be repeated up to 4 s.h.
Prereq.: Approval of Department Chair; and ITAL 1506 or ITAL 2600 or placement test.

ITAL 3702  Intensive Italian Review 4 s.h.
Intensive training in understanding, speaking, reading, and writing Italian. Grammatical structures and vocabulary in context.
Prereq.: ITAL 2605.

ITAL 3726  Italian Phonetics Phonology 4 s.h.
Current theory in Italian phonetics and phonology aimed at improving the pronunciation and intonation of second language learners. Attention given to a comparison of the Italian and English phonological systems and the phonological comparisons of standard and regional dialects of Italian. Regular in-class discussion, linguistic analyses, and practice on phonological data sets, all in Italian.
Prereq.: Either ITAL 2607 and ITAL 2608; or ITAL 3702.

ITAL 3735  Italian Civilization and Culture 4 s.h.
A condensed study of the geography, history, literature and social heritage of Italy, from the fall of the Roman Empire to the present. Regular in-class discussion and occasional in-class writing assignments, all in Italian.
Prereq.: Either ITAL 2607 and ITAL 2608; or ITAL 3702.

ITAL 3736  Italian Linguistics 4 s.h.
Basic concepts and issues of modern Italian linguistic theory in the areas of phonology, morphology, syntax, semantics, and pragmatics. Emphasis is placed on sociolinguistics, dialectology and Italian dialect endangerment. Regular in-class discussion and occasional in-class writing assignments, all in Italian.
Prereq.: Either ITAL 2607 and ITAL 2608; or ITAL 3702.

ITAL 3740  Survey of Italian Literature 1 4 s.h.
Introduction to Italian literature from the 14th Century to the Renaissance through representative selections of key literary figures. Theoretical and critical approaches to help interpret texts. Regular in-class discussion and occasional in-class writing assignments, all in Italian.
Prereq.: Either ITAL 2607 and ITAL 2608; or ITAL 3702.

ITAL 3741  Survey of Italian Literature 2 4 s.h.
Introduction to Italian literature from the Enlightenment to the present through representative selections of key literary figures. Theoretical and critical approaches to help interpret texts. Regular in-class discussion and occasional in-class writing assignments, all in Italian.
Prereq.: Either ITAL 2607 and ITAL 2608; or ITAL 3702.

ITAL 3750  Contemporary Italian Literature 4 s.h.
A study of contemporary Italian literature and its movements and innovations across a variety of genres, including fiction, memoir, poetry, song lyrics, rap and journalism. Featuring the works of Ammanati, Baricco, Benni, Consoli, Khouma, Mazzucco, Severgnini and Virzl. Regular in-class discussion and occasional in-class writing assignments, all in Italian.
Prereq.: Either ITAL 2607 and ITAL 2608; or ITAL 3702.

ITAL 3755  Advanced Italian Conversation and Composition 4 s.h.
Development of written expression through a systematic study of Italian morphology, sentence structure, and usage applied to a variety of written discourse styles such as description, narration, and exposition. Development of oral expression through discussion of current topics in the context of Italian culture, politics, and economics. Expansion of vocabulary. Laboratory work according to individual needs.
Prereq.: Either ITAL 2607 and ITAL 2608; or ITAL 3702.

ITAL 3760  Literary Representations of 19th Century Italy 4 s.h.
A study of literary representations of 19th century Italy and the Italians from the pre-Risorgimento era through the turn of the century, with concentration on the works of Foscolo, Manzoni, Verga and di Lampedusa. Regular in-class discussion and occasional in-class writing assignments, all in Italian.
Prereq.: Either ITAL 2607 or ITAL 2608; or ITAL 3702.

ITAL 3770  Special Topics in Italian 4 s.h.
Study of an author, genre, movement or historical period in Italian literature, culture or history. May be repeated if the topic changes.
Prereq.: Either ITAL 2607 or ITAL 2608; or ITAL 3702.

ITAL 3780  Italian Composition and Conversation Review 3 s.h.
Review course emphasizing impromptu conversations and in-class essay writing. Intended for students who need additional coursework to achieve the level of Advanced Low on the ACTFL Oral Proficiency Interview and/or the ACTFL Writing Proficiency Test. May not be counted toward the major. Grading CR/NC.
Prereq.: 16 s.h. in Italian at the 3700 level or above and permission of Chair.

ITAL 3798  Study Abroad in Sicily 4 s.h.
A structured but individualized program of study at the Culturforum Italian Language School in Cefalu, Sicily.
Prereq.: Either ITAL 3702 or both ITAL 2605 and permission of Chair.
ITAL 3799 Study Abroad in Italian 1-15 s.h.
An individually-arranged program of foreign study in the Italian language. Programs can be of two general types: (1) trips or residential programs sponsored by consortial universities, and (2) independent academic coursework through institutions with which YSU does not have a consortial agreement. A written statement detailing the student’s academic plan must be approved by a member of the Italian faculty, the chair of Foreign Languages and the dean of CLASS prior to the trip. Credit toward fulfillment of requirements for the Italian major will be determined by the chair of Foreign Languages and the Italian faculty. May be repeated up to a total of 15 s.h., if specific course content changes. Note: study abroad generally requires about one year’s advance planning.
Prereq.: Sophomore status and approval of the chair of Foreign Languages.

ITAL 4880 Italian Conversation and Composition Capstone 4 s.h.
Capstone course emphasizing impromptu conversations and in-class essay writing. Students should achieve a level of Advanced Low on both the ACTFL Oral Proficiency Interview and the ACTFL Writing Proficiency Test.
Prereq.: 16 s.h. in Italian at the 3700 level or above and permission of Chair.
Gen Ed: Capstone.

Latin

LATN 1550 Elementary Latin 4 s.h.
Introduction to Latin, with emphasis on those aspects of grammar most essential for developing the ability to read Latin. Translation of simple Latin texts into English. Introduction to the culture of the late Roman Republic, including reading selected primary sources in English. Assignments in the Language Learning and Resource Center (LLRC). Grading is ABC/NC.

LATN 2600 Intermediate Latin 4 s.h.
Continuation of Latin 1550 with emphasis on more complex aspects of Latin grammar. Translation of more advanced Latin texts, including some authentic passages.
Prereq.: Placement test or LATN 1550.

LATN 2603 Directed Reading in Latin 1 3 s.h.
Reading of selections from a Latin author or genre with emphasis on translation. Review of Latin grammar and introduction of some advanced grammatical constructions not covered in Latin 1550 or LATN 2600. May be repeated once if topic is different.
Prereq.: Placement test or LATN 2600.

LATN 3753 Directed Reading in Latin 2 3 s.h.
Reading of selections from a Latin author or genre with emphasis on translation and interpretation of text. Review of Latin grammar, introduction to relevant modern scholarship, and writing of evaluative essays. May be repeated once if topic is different.
Prereq.: LATN 2603 and permission of Chair.

LATN 4883 Directed Reading in Latin 3 3 s.h.
Reading of selections from a Latin author or genre with emphasis on translation and interpretation of text, review of Latin grammar, and writing of a research paper. May be repeated once if topic is different.
Prereq.: LATN 3753 and permission of Chair.

Spanish

SPAN 1550 Elementary Spanish 4 s.h.
Intensive training in understanding, speaking, reading, and writing Spanish. Geography and daily life, as well as appreciation of the culture of its speakers, are studied. Assignments in the Language Learning and Resource Center (LLRC). Grading is ABC/NC.

SPAN 2600 Intermediate Spanish 4 s.h.
Intensive training in understanding, speaking, reading, and writing Spanish; geography and daily life, as well as appreciation of the cultures of Spanish speakers are studied. Assignments in the Language Learning and Resource Center (LLRC).
Prereq.: Placement test or SPAN 1550.

SPAN 2605 Advanced Intermediate Spanish 3 s.h.
Review and expansion of basic Spanish language skills and cultural information. Assignments in the Language Learning and Resource Center (LLRC).
Prereq.: Placement test or SPAN 2600.

SPAN 3701 Service Learning in Spanish 1-2 s.h.
Using the Spanish language to engage in community service or an internship. Completion of a journal written in Spanish and detailing the experience is required. May be repeated up to 4 s.h.
Prereq.: Approval of Department Chair; and SPAN 2600 or placement test.

SPAN 3702 Intensive Spanish Review 3 s.h.
Further study of the Spanish language and Hispanic cultures through oral, written, and reading activities. Focus is on contextualized vocabulary and review of grammar to help students move towards a more advanced level.
Prereq.: SPAN 2605.

SPAN 3724 Spanish Pronunciation 3 s.h.
Theory and practice of Spanish pronunciation. Description of production of Spanish speech sounds and general characteristics of Spanish pronunciation. Topics on intonation. Audio-lingual practice in class and in language laboratory.
Prereq.: SPAN 3702.

SPAN 3735 Advanced Spanish Grammar and Composition 3 s.h.
A systematic study of Spanish morphology, sentence structure, and usage applied to a variety of written discourse styles such as description, narration, and exposition. Discussion of contrasts with English discourse styles, and effective grammatical use.
Prereq.: SPAN 3702.

SPAN 3736 Introduction to Spanish Linguistics 3 s.h.
Examines some of the basic concepts and issues of modern Spanish linguistic theory in the areas of phonology, morphology, syntax and pragmatics, with special emphasis on sociolinguistics.
Prereq.: SPAN 3702.

SPAN 3737 Translation and Composition 3 s.h.
Study of translation techniques, and practice in translating from Spanish into English and from English into Spanish, working with a variety of texts from the social sciences, natural sciences, and technology. Emphasis on interpretation of vocabulary and idioms.
Prereq.: SPAN 3735 or SPAN 3736.

SPAN 3740 Business Spanish 3 s.h.
Principles of effective commercial letter and report writing and oral communication in business in the Spanish-speaking world.
Prereq.: SPAN 2605.

SPAN 3755 Advanced Spanish Conversation 3 s.h.
Development of oral expression through discussion of current topics in the context of worldwide Hispanic culture, politics, and economics. Expansion of vocabulary. Laboratory work according to individual needs.
Prereq.: SPAN 3702.

SPAN 3758 Culture and Literature of Spanish-Speaking Groups in the United States 3 s.h.
Provides an overview of the significant culture and literature of the diverse Hispanic groups in the U.S. The relationship between literature and society broached through an in-depth discussion of several representative texts and their historical and political background.
Prereq.: SPAN 3702.

SPAN 3762 Culture: Spain 3 s.h.
Examination of the cultural landscape and major issues in Spanish society through the study of art, history, geography, politics, music, cinema, popular culture, and cultural groups in the various regions of Spain.
Prereq.: SPAN 3702.
SPAN 3763  Introduction to Literature: Spain  3 s.h.
Introduction to Peninsular literature through representative selections of key works of fiction, poetry and film. Theoretical and critical approaches to help the student interpret texts.
Prereq.: SPAN 3702.

SPAN 3766  Culture: Spanish-America  3 s.h.
This course examines the cultural landscape and major issues in Spanish-American society through the study of art, history, geography, politics, music, cinema, popular culture, and cultural groups in the various regions.
Prereq.: SPAN 3702.

SPAN 3767  Introduction to Literature: Spanish-America  3 s.h.
Introduction to Spanish-American literature through representative selections of key works of fiction, poetry and film. Theoretical and critical approaches to help the student interpret texts.
Prereq.: SPAN 3702.

SPAN 3780  Spanish Composition and Conversation Review  3 s.h.
Review course emphasizing impromptu conversations and in-class essay writing. Intended for students who need additional coursework to achieve the level of Advanced Low on the ACTFL Oral Proficiency Interview and/or ACTFL Writing Proficiency Test. May not be counted toward the major. Grading is CR/NC.
Prereq.: 15 s.h. in Spanish at the 3700 level or above and permission of Chair.

SPAN 3798  Study Abroad in Colombia  4 s.h.
A structured but individualized program of study at the Universidad del Norte in Barranquilla, Colombia. The course encompasses an orientation prior to the study abroad experience and the study abroad experience itself. A grade will not be given until the student returns from the study abroad.
Prereq.: SPAN 3702.

SPAN 3799  Study Abroad in Spanish 1-15 s.h.
An individually-arranged program of foreign study in the Spanish language. Programs can be of two general types: (1) trips or residential programs sponsored by consortial universities, and (2) independent academic coursework through institutions with which YSU does not have a consortial agreement. A written statement detailing the student's academic plan must be approved by a member of the Spanish faculty, the chair of Foreign Languages and the dean of CLASS prior to the trip. Credit toward fulfillment of requirements for the Spanish major will be determined by the chair of Foreign Languages and the Spanish faculty. May be repeated up to a total of 15 s.h., if specific course content changes. Note: study abroad generally requires about one year's advance planning.
Prereq.: Sophomore status and approval of the chair of Foreign Languages.

SPAN 4880  Spanish Conversation and Composition Capstone  3 s.h.
Capstone course emphasizing impromptu conversation and in-class essay writing. Student must achieve a level of Advanced Low on both the ACTFL Oral Proficiency Interview and the ACTFL Writing Proficiency Test.
Prereq.: 15 s.h. in Spanish at the 3700 level or above and permission of Chair.

SPAN 4881  Spanish Composition and Conversation Capstone  3 s.h.
Capstone course emphasizing impromptu conversations and in-class essay writing. Students must achieve a level of Intermediate High on both the ACTFL Oral Proficiency Interview and the ACTFL Writing Proficiency Test.
Prereq.: 15 s.h. in Spanish at the 3700 level or above and permission of Chair.

SPAN 5855  Topics in Spanish Language and Linguistics  3 s.h.
An introduction to the terminology, concepts, bibliography and current issues in Spanish language and linguistics. Major topics include phonology, morphology, semantics, syntax, applied linguistics, transformational grammar, and other topics related to language variation and society. May be repeated once when topic varies.
Prereq.: Any 3700-level SPAN course.

SPAN 5870  Topics in Spanish Literature: Spain  3 s.h.
Study of an author, a genre, or a movement in Spanish literature from 1492 to the present. The topic will be announced each time the course is offered. May be taken three times if content is not repeated.
Prereq.: SPAN 3762 or SPAN 3763.

SPAN 5885  Topics in Hispanic Literature and Film  3 s.h.
Examines the relationship between the Hispanic narrative discourse and cinema, including film adaptations of literary works. Modern social and cultural issues, as well as Hispanic self-images. May be taken three times if content is not repeated.
Prereq.: one of SPAN 3762, SPAN 3763, SPAN 3766, SPAN 3767.
Gen Ed: Capstone.

SPAN 5890  Topics in Spanish Literature: Spanish-America  3 s.h.
Study of an author, a genre, or a movement in Latin America from 1492 to the present. The topic will be announced each time the course is offered. May be taken three times if content is not repeated.
Prereq.: SPAN 3766 or SPAN 3767.
Gen Ed: Capstone.

### Bachelor of Arts in Italian

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>YSU 1500</td>
<td>Success Seminar</td>
</tr>
<tr>
<td>or SS 1500</td>
<td>Strong Start Success Seminar</td>
</tr>
<tr>
<td>or HONR 1500</td>
<td>Intro to Honors</td>
</tr>
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### General Education Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>S.H.</th>
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</thead>
<tbody>
<tr>
<td>ENGL 1550</td>
<td>Writing 1</td>
<td>3-4</td>
</tr>
<tr>
<td>or ENGL 1549</td>
<td>Writing 1 with Support</td>
<td></td>
</tr>
<tr>
<td>ENGL 1551</td>
<td>Writing 2</td>
<td>3</td>
</tr>
<tr>
<td>CMST 1545</td>
<td>Communication Foundations</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics Requirement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arts and Humanities (2 courses)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Natural Sciences (2 courses, 1 with lab) (6-7 s.h.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Science (2 courses)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social and Personal Awareness (2 courses)</td>
<td></td>
<td></td>
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</tbody>
</table>

### Major Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITAL 2607</td>
<td>Intermediate Italian 1</td>
</tr>
<tr>
<td>ITAL 2608</td>
<td>Intermediate Italian 2</td>
</tr>
<tr>
<td>ITAL 4880</td>
<td>Italian Conversation and Composition Capstone ¹</td>
</tr>
</tbody>
</table>

Select five courses from the following (20 s.h.):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITAL 3726</td>
<td>Italian Phonetics Phonology</td>
</tr>
<tr>
<td>ITAL 3735</td>
<td>Italian Civilization and Culture</td>
</tr>
<tr>
<td>ITAL 3736</td>
<td>Italian Linguistics</td>
</tr>
<tr>
<td>ITAL 3740</td>
<td>Survey of Italian Literature 1</td>
</tr>
<tr>
<td>ITAL 3741</td>
<td>Survey of Italian Literature 2</td>
</tr>
<tr>
<td>ITAL 3750</td>
<td>Contemporary Italian Literature</td>
</tr>
<tr>
<td>ITAL 3755</td>
<td>Advanced Italian Conversation and Composition</td>
</tr>
<tr>
<td>ITAL 3760</td>
<td>Literary Representations of 19th Century Italy</td>
</tr>
<tr>
<td>ITAL 3799</td>
<td>Study Abroad in Italian</td>
</tr>
</tbody>
</table>

Minor: 18

Electives to meet 120 hours: 32

Total Semester Hours: 120-122

¹ The goal of ITAL 4880 Italian Conversation and Composition Capstone is to have the student achieve the level of Advanced Low on the ACTFL Oral Proficiency Interview and Writing Proficiency Test.

### Study Abroad in Italy

Italian majors are encouraged to study abroad at some point in their undergraduate career. Credits earned in ITAL 3799 Study Abroad in Italian may be counted toward the major. Students should consult with the Italian faculty and with the International Programs Office for assistance in choosing an appropriate program.
Year 1

Fall
YSU 1500 Success Seminar 1
ITAL 1505 Elementary Italian 1 4
ENGL 1550 or ENGL 1549 Writing 1 or Writing 1 with Support 3-4
MATH 2623 or PHIL 2619 or STAT 2601 Quantitative Reasoning or Introduction to Logic or Introductory Statistics 3
Natural Science GER 3
Semester Hours 14-15

Spring
ITAL 1506 Elementary Italian 2 4
ENGL 1551 Writing 2 3
CMST 1545 Communication Foundations 3
Social and Personal Awareness GER 3
Arts and Humanities GER 3
Semester Hours 16

Year 2

Fall
ITAL 2607 Intermediate Italian 1 4
Natural Science with Lab GER 4
Social and Personal Awareness GER 3
Minor course 3
Semester Hours 14

Spring
ITAL 2608 Intermediate Italian 2 4
Social Science GER 3
Arts and Humanities GER 3
Minor course 3
ITAL 3701 Service Learning in Italian (or in Spring of third year) 2
Semester Hours 15

Year 3

Fall
ITAL 3700-level course 1 4
Social Science GER 3
Minor 2600/3700-level course 3
Elective 3
Elective 3
Semester Hours 16

Spring
ITAL 3700-level course 1 4
ITAL 3700-level course 1 4
Minor 2600/3700-level course 3
Elective 3700/4800-level 3
Semester Hours 14

Year 4

Fall
ITAL 3700-level course 1 4
Minor 3700/4800-level course 3
Elective 3700/4800-level 3
Elective 3700/4800-level 3
Elective 3
Semester Hours 16

Spring
ITAL 3700-level course 1 4
Semester Hours 16

1 Each semester one or two of the following courses are offered: ITAL 3726, ITAL 3735, ITAL 3736, ITAL 3740, ITAL 3741, ITAL 3750, ITAL 3755, ITAL 3760.

Learning Outcomes

The department’s learning outcomes for foreign language majors are as follows:

CULTURAL UNDERSTANDING
The student will develop an understanding and appreciation of the history and culture of those areas in which the target language is spoken.

READING COMPREHENSION
The student will be able to read and understand a variety of materials written in the target language. These materials may include but are not limited to: novels, plays, poetry, newspaper and magazine articles, and private correspondence (e.g., business communications).

LISTENING COMPREHENSION
The student will be able to understand the target language when spoken in a variety of contexts. These contexts may include but are not limited to: conversation with another individual or individuals, formal lectures, song, and film.

ORAL EXPRESSION
The student will be able to carry on a conversation and deliver a speech in the target language. The student will achieve a level of Advanced Low on the Oral Proficiency Interview administered by the American Council on the Teaching of Foreign Languages.

WRITTEN EXPRESSION
The student will be able to compose in the target language a variety of written documents. These documents may include but are not limited to: formal and casual correspondence, essays, and creative works. The student will achieve a level of Advanced Low on the Writing Proficiency Test administered by the American Council on the Teaching of Foreign Languages.

Bachelor of Arts in Spanish

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>YSU 1500</td>
<td>Success Seminar</td>
</tr>
<tr>
<td>or SS 1500</td>
<td>Strong Start Success Seminar</td>
</tr>
<tr>
<td>or HONR 1500</td>
<td>Intro to Honors</td>
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</table>

General Education Requirements

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
</tr>
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<tbody>
<tr>
<td>ENGL 1550</td>
<td>Writing 1</td>
</tr>
<tr>
<td>or ENGL 1549</td>
<td>Writing 1 with Support</td>
</tr>
<tr>
<td>ENGL 1551</td>
<td>Writing 2</td>
</tr>
<tr>
<td>CMST 1545</td>
<td>Communication Foundations</td>
</tr>
<tr>
<td>Mathematics Requirement</td>
<td>3</td>
</tr>
<tr>
<td>Arts and Humanities (6 s.h.)</td>
<td>6</td>
</tr>
<tr>
<td>Natural Sciences (2 courses, 1 with lab) (6-7 s.h.)</td>
<td>7</td>
</tr>
<tr>
<td>Social Science (6 s.h.)</td>
<td>6</td>
</tr>
<tr>
<td>Social and Personal Awareness (6 s.h.)</td>
<td>6</td>
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</table>
## Major Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPAN 2605</td>
<td>Advanced Intermediate Spanish</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 3702</td>
<td>Intensive Spanish Review</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 3735</td>
<td>Advanced Spanish Grammar and Composition</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 3755</td>
<td>Advanced Spanish Conversation</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 4880</td>
<td>Spanish Conversation and Composition Capstone</td>
<td>3</td>
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Six of the following: 18-19

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>SPAN 3724</td>
<td>Spanish Pronunciation</td>
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<tr>
<td>SPAN 3736</td>
<td>Introduction to Spanish Linguistics</td>
<td></td>
</tr>
<tr>
<td>SPAN 3740</td>
<td>Business Spanish</td>
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<tr>
<td>SPAN 3758</td>
<td>Culture and Literature of Spanish-Speaking Groups in the United States</td>
<td></td>
</tr>
<tr>
<td>SPAN 3762</td>
<td>Culture: Spain</td>
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<tr>
<td>SPAN 3763</td>
<td>Introduction to Literature: Spain</td>
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<tr>
<td>SPAN 3766</td>
<td>Culture: Spain-America</td>
<td></td>
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<tr>
<td>SPAN 3767</td>
<td>Introduction to Literature: Spanish-America</td>
<td></td>
</tr>
<tr>
<td>SPAN 3798</td>
<td>Study Abroad in Colombia (4 semester hours)</td>
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### Minor

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>18</td>
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</table>

### Electives to meet 120 hours

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>31</td>
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</tbody>
</table>

### Total Semester Hours

<table>
<thead>
<tr>
<th>Hours</th>
<th>120-123</th>
</tr>
</thead>
</table>

1 In order to complete SPAN 4880 Spanish Conversation and Composition Capstone, the student must achieve the level of Advanced Low on the ACTFL Oral Proficiency Interview and Writing Proficiency Test.

## Study Abroad in Colombia

In May and June of odd-numbered years, students who have completed SPAN 3702 Intensive Spanish Review may enroll in SPAN 3798 Study Abroad in Colombia. During this program, students live in Barranquilla, Colombia, and study Spanish at the Universidad del Norte. Contact the Department of World Languages and Cultures for additional information.

### Year 1

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>YSU 1500</td>
<td>Success Seminar</td>
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<tr>
<td></td>
<td>SPAN 1550</td>
<td>Elementary Spanish</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>ENGL 1550 or ENGL 1549</td>
<td>Writing 1 or Writing 1 with Support</td>
<td>3-4</td>
</tr>
<tr>
<td></td>
<td>MATH 2523 or PHIL 2619 or STAT 2601</td>
<td>Quantitative Reasoning or Introduction to Logic or Introductory Statistics</td>
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<tr>
<td></td>
<td>Social and Personal Awareness GER</td>
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<td>3</td>
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</table>

| Semester Hours | 14-15 |

### Year 2

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course</th>
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<th>Hours</th>
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<tbody>
<tr>
<td>Fall</td>
<td>SPAN 2605</td>
<td>Advanced Intermediate Spanish</td>
<td>3</td>
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<tr>
<td></td>
<td>Social Science GER</td>
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<td>3</td>
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<tr>
<td></td>
<td>Social and Personal Awareness GER</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Arts and Humanities GER</td>
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<td></td>
<td>Minor course</td>
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| Semester Hours | 15 |

### Spring

<table>
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<tr>
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<tr>
<td>SPAN 3702</td>
<td>Intensive Spanish Review</td>
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<td>Natural Science with Lab GER</td>
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<td>Social Science GER</td>
<td>3</td>
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<tr>
<td>Minor course</td>
<td>3</td>
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<tr>
<td>SPAN 3798</td>
<td>Study Abroad in Colombia (if odd-numbered year) or elective (3 semester hours)</td>
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| Semester Hours | 16-17 |

### Year 3

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course</th>
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<tbody>
<tr>
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<tr>
<td></td>
<td>SPAN 3700-level course</td>
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<td>3</td>
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<tr>
<td></td>
<td>Minor 2600/3700-level course</td>
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<tr>
<td></td>
<td>Elective</td>
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</tr>
<tr>
<td></td>
<td>Elective 3700/4800-level</td>
<td>3</td>
<td></td>
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<tr>
<td></td>
<td>SPAN 3798</td>
<td>Study Abroad in Colombia (if odd-numbered year) or elective (3 semester hours)</td>
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| Semester Hours | 15 |

### Spring

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>SPAN 3700-level course</td>
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<td>3</td>
</tr>
<tr>
<td>SPAN 3700-level course</td>
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<tr>
<td>Elective 3700/4800-level</td>
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<tr>
<td>SPAN 3701</td>
<td>Service Learning in Spanish ( or Elective 3700/4800 level)</td>
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| Semester Hours | 14-15 |

### Year 4

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<th>Course</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>Fall</td>
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<td>3</td>
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<tr>
<td></td>
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<tr>
<td></td>
<td>Elective 3700/4800-level</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SPAN 3701</td>
<td>Service Learning in Spanish ( or Elective 3700/4800 level)</td>
<td>2-3</td>
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</tbody>
</table>

| Semester Hours | 12 |

### Total Semester Hours

| Hours | 118-120 |

1 Each semester at least two of the following courses will be offered: SPAN 3724, SPAN 3735, SPAN 3736, SPAN 3740, SPAN 3755, SPAN 3758, SPAN 3762, SPAN 3763, SPAN 3766, SPAN 3767, SPAN 3798.

## Learning Outcomes

The department’s learning outcomes for foreign language majors are as follows:

### CULTURAL UNDERSTANDING

The student will develop an understanding and appreciation of the history and culture of those areas in which the target language is spoken.

### READING COMPREHENSION

The student will be able to read and understand a variety of materials written in the target language. These materials may include but are not limited
to: novels, plays, poetry, newspaper and magazine articles, and private correspondence (e.g., business communications).

LISTENING COMPREHENSION
The student will be able to understand the target language when spoken in a variety of contexts. These contexts may include but are not limited to: conversation with another individual or individuals, formal lectures, song, and film.

ORAL EXPRESSION
The student will be able to carry on a conversation and deliver a speech in the target language. The student will achieve a level of Advanced Low on the Oral Proficiency Interview administered by the American Council on the Teaching of Foreign Languages.

WRITTEN EXPRESSION
The student will be able to compose in the target language a variety of written documents. These documents may include but are not limited to: formal and casual correspondence, essays, and creative works. The student will achieve a level of Advanced Low on the Writing Proficiency Test administered by the American Council on the Teaching of Foreign Languages.

Minor in French

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Courses</td>
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</tr>
<tr>
<td>FRNC 2600</td>
<td>Intermediate French</td>
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</tr>
<tr>
<td>FRNC 2605</td>
<td>Advanced Intermediate French</td>
<td>3</td>
</tr>
<tr>
<td>FRNC 2606</td>
<td>Intensive French Review</td>
<td>3</td>
</tr>
<tr>
<td>Select an additional 8-9 hours of French (FRNC) courses at the 3700 level.</td>
<td>8-9</td>
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</tr>
<tr>
<td>Total Semester Hours</td>
<td>18-19</td>
<td></td>
</tr>
</tbody>
</table>

Credit by Examination for FRNC 2600 Intermediate French
A student who places into FRNC 2605 Advanced Intermediate French and successfully completes that course or who has received credit by examination for it (e.g., AP or CLEP) may apply for credit by examination for FRNC 2600 Intermediate French, thereby expediting the attainment of a French minor.

Minor in Greek Studies

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Courses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GRK 2600</td>
<td>Intermediate Ancient Greek</td>
<td>4</td>
</tr>
<tr>
<td>GRK 2603</td>
<td>Directed Reading in Ancient Greek 1 (may be repeated with different content)</td>
<td>3-6</td>
</tr>
<tr>
<td>GRK 3753</td>
<td>Directed Reading in Ancient Greek 2 (may be repeated with different content)</td>
<td>6-3</td>
</tr>
<tr>
<td>GRK 4883</td>
<td>Directed Reading in Ancient Greek 3 (may be repeated with different content)</td>
<td>6-3</td>
</tr>
<tr>
<td>One of the following courses may be substituted for a Greek language course:</td>
<td>0-4</td>
<td></td>
</tr>
<tr>
<td>FNLG 2660</td>
<td>Women in the Ancient World (3 semester hours)</td>
<td></td>
</tr>
<tr>
<td>HIST 3753</td>
<td>Ancient History 1 (3 semester hours)</td>
<td></td>
</tr>
<tr>
<td>LATN 1550</td>
<td>Elementary Latin (4 semester hours)</td>
<td></td>
</tr>
<tr>
<td>Total Semester Hours</td>
<td>13-26</td>
<td></td>
</tr>
</tbody>
</table>

Minor in Italian

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Courses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ITAL 1506</td>
<td>Elementary Italian 2</td>
<td>4</td>
</tr>
<tr>
<td>ITAL 2607</td>
<td>Intermediate Italian 1</td>
<td>4</td>
</tr>
<tr>
<td>ITAL 2608</td>
<td>Intermediate Italian 2</td>
<td>4</td>
</tr>
<tr>
<td>Select 6-8 hours of additional Italian course at the 3700 level.</td>
<td>6-8</td>
<td></td>
</tr>
<tr>
<td>Total Semester Hours</td>
<td>18-20</td>
<td></td>
</tr>
</tbody>
</table>

Credit by Examination for ITAL 1506 Elementary Italian 2
A student who places into ITAL 2607 Intermediate Italian 1 and successfully completes that course or ITAL 2608 Intermediate Italian 2 may apply for credit by examination for ITAL 1506 Elementary Italian 2, thereby expediting the attainment of the Italian minor.

Study Abroad in Italy
Students minoring in Italian are encouraged to study abroad in Italy. Students should consult with the Italian faculty and with the International Programs Office for assistance in choosing an appropriate program.

Minor in Latin

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
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</thead>
<tbody>
<tr>
<td>Required Courses</td>
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<td></td>
</tr>
<tr>
<td>LATN 2600</td>
<td>Intermediate Latin</td>
<td>4</td>
</tr>
<tr>
<td>LATN 2603</td>
<td>Directed Reading in Latin 1 (may be repeated with different content)</td>
<td>3-6</td>
</tr>
<tr>
<td>LATN 3753</td>
<td>Directed Reading in Latin 2 (may be repeated with different content)</td>
<td>3-6</td>
</tr>
<tr>
<td>LATN 4883</td>
<td>Directed Reading in Latin 3 (may be repeated with different content)</td>
<td>3-6</td>
</tr>
<tr>
<td>One of the following courses may be substituted for a Latin language course:</td>
<td>0-4</td>
<td></td>
</tr>
<tr>
<td>FNLG 2660</td>
<td>Women in the Ancient World (3 semester hours)</td>
<td></td>
</tr>
<tr>
<td>HIST 3753</td>
<td>Ancient History 2 (3 semester hours)</td>
<td></td>
</tr>
<tr>
<td>GRK 1550</td>
<td>Elementary Ancient Greek (4 semester hours)</td>
<td></td>
</tr>
<tr>
<td>Total Semester Hours</td>
<td>13-26</td>
<td></td>
</tr>
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</table>

Minor in Spanish

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Required Courses</td>
<td></td>
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</tr>
<tr>
<td>SPAN 2600</td>
<td>Intermediate Spanish</td>
<td>4</td>
</tr>
<tr>
<td>SPAN 2605</td>
<td>Advanced Intermediate Spanish</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 3702</td>
<td>Intensive Spanish Review</td>
<td>3</td>
</tr>
<tr>
<td>Select an additional 8-9 hours of Spanish (SPAN) courses at the 3700 level.</td>
<td>8-9</td>
<td></td>
</tr>
<tr>
<td>Total Semester Hours</td>
<td>18-19</td>
<td></td>
</tr>
</tbody>
</table>

Credit by Examination for SPAN 2600 Intermediate Spanish
A student who places into SPAN 2605 Advanced Intermediate Spanish and successfully completes that course may apply for credit by examination for SPAN 2600 Intermediate Spanish, thereby expediting the attainment of a Spanish minor.
Study Abroad in Colombia
A student who completes SPAN 3702 Intensive Spanish Review may then take SPAN 3798 Study Abroad in Colombia. For additional information see the BA in Spanish (http://catalog.ysu.edu/undergraduate/colleges-programs/college-liberal-arts-social-sciences/department-foreign-languages-literatures/ba-spanish/).

Certificate in French
COURSE    TITLE                S.H.
FRNC 2600  Intermediate French 4
FRNC 2605  Advanced Intermediate French 3
FRNC 2606  Intensive French Review 3
FRNC 3799  Study Abroad in French 4

Credit by Examination for
FRNC 2600 Intermediate French
A student who places into FRNC 2605 Advanced Intermediate French and successfully completes that course or who has received credit by examination for it (e.g., AP or CLEP) may apply for credit by examination for FRNC 2600 Intermediate French, thereby expediting the attainment of a French certificate.

Learning Outcomes
Cultural Understanding
The student will start to develop an understanding and appreciation of the history and culture of those areas in which the target language is spoken. Attainment of this outcome will be facilitated by the mandated study abroad.

Reading Comprehension
The student will be able to read and understand a variety of straightforward materials written in the target language. These materials may include but are not limited to: signs, menus, schedules, poetry, newspaper and magazine articles, and private correspondence (e.g., business communications).

Listening Comprehension
The student will be able to understand the target language when spoken in a variety of contexts. These contexts may include but are not limited to: conversation with another individual or individuals, songs, and films.

Oral Expression
The student will be able to carry on a rudimentary conversation and deliver a short speech in the target language. The student’s discourse will be comprehensible to a native speaker of the language accustomed to dealing with non-native speakers.

Written Expression
The student will be able to compose in the target language a variety of straightforward written documents. These documents may include but are not limited to: formal and casual correspondence, short essays, summaries, and notes. The student’s writing will be comprehensible to a native speaker of the language accustomed to dealing with non-native speakers.

Certificate in Spanish
COURSE    TITLE                S.H.
SPAN 2600  Intermediate Spanish 4
SPAN 2605  Advanced Intermediate Spanish 3
SPAN 3702  Intensive Spanish Review 3
SPAN 3798  Study Abroad in Colombia 4

Credit by Examination for
SPAN 2600 Intermediate Spanish
A student who places into SPAN 2605 Advanced Intermediate Spanish and successfully completes that course may apply for credit by examination for ITAL 1506 Elementary Italian 2, thereby expediting the attainment of the Italian certificate.

Study Abroad in Italian
In order to complete the Italian Certificate, the student must complete a 3-credit study abroad program in Italy. Students should consult with the Italian faculty and with the International Programs Office for assistance in choosing an appropriate program.

Learning Outcomes
Cultural Understanding
The student will start to develop an understanding and appreciation of the history and culture of those areas in which the target language is spoken. Attainment of this outcome will be facilitated by the mandated study abroad.

Reading Comprehension
The student will be able to read and understand a variety of straightforward materials written in the target language. These materials may include but are not limited to: signs, menus, schedules, poetry, newspaper and magazine articles, and private correspondence (e.g., business communications).

Listening Comprehension
The student will be able to understand the target language when spoken in a variety of contexts. These contexts may include but are not limited to: conversation with another individual or individuals, songs, and films.

Oral Expression
The student will be able to carry on a rudimentary conversation and deliver a short speech in the target language. The student’s discourse will be comprehensible to a native speaker of the language accustomed to dealing with non-native speakers.

Written Expression
The student will be able to compose in the target language a variety of straightforward written documents. These documents may include but are not limited to: formal and casual correspondence, short essays, summaries, and notes. The student’s writing will be comprehensible to a native speaker of the language accustomed to dealing with non-native speakers.

Certificate in Italian
COURSE    TITLE                S.H.
ITAL 1506  Elementary Italian 2 4
ITAL 2607  Intermediate Italian 1 4

Credit by Examination for
SPAN 2600 Intermediate Spanish
A student who places into SPAN 2605 Advanced Intermediate Spanish and successfully completes that course may apply for credit by examination for ITAL 1506 Elementary Italian 2, thereby expediting the attainment of the Italian certificate.
for SPAN 2600 Intermediate Spanish, thereby expediting the attainment of a Spanish certificate.

**Study Abroad in Colombia**

A student who completes SPAN 3702 Intensive Spanish Review may then take SPAN 3798 Study Abroad in Colombia. For additional information see the BA in Spanish (http://catalog.ysu.edu/undergraduate/colleges-programs/college-liberal-arts-social-sciences/department-foreign-languages-literatures/ba-spanish/).

**Learning Outcomes**

**Cultural Understanding**

The student will start to develop an understanding and appreciation of the history and culture of those areas in which the target language is spoken. Attainment of this outcome will be facilitated by the mandated study abroad.

**Reading Comprehension**

The student will be able to read and understand a variety of straightforward materials written in the target language. These materials may include but are not limited to: signs, menus, schedules, poetry, newspaper and magazine articles, and private correspondence (e.g., business communications).

**Listening Comprehension**

The student will be able to understand the target language when spoken in a variety of contexts. These contexts may include but are not limited to: conversation with another individual or individuals, songs, and films.

**Oral Expression**

The student will be able to carry on a rudimentary conversation and deliver a short speech in the target language. The student's discourse will be comprehensible to a native speaker of the language accustomed to dealing with non-native speakers.

**Written Expression**

The student will be able to compose in the target language a variety of straightforward written documents. These documents may include but are not limited to: formal and casual correspondence, short essays, summaries, and notes. The student's writing will be comprehensible to a native speaker of the language accustomed to dealing with non-native speakers.

**Department of Humanities and Social Sciences**

**Welcome to Humanities and Social Sciences**

Welcome to Youngstown State University and the Department of Humanities and Social Sciences (HSS). The newly formed department is comprised of the former departments of Anthropology and Sociology, Geography and Urban Studies, History, Philosophy and Religious Studies, and Politics and International Relations and also includes MA programs in History and in American Studies. Our department embodies the YSU mission of inspiring individuals, enhancing futures, and enriching lives. Graduates from the programs in this department are lifelong learners who go on to be leaders in their communities and work places, as well as attend some of the best graduate and professional programs in the world.

The programs in HSS help students develop useful and marketable skills and perspectives that are broadly applicable and always in demand despite an ever-changing world. These include critical thinking, analytical and research techniques, cogent argumentation and communication in both traditional and digital formats, and a deeper understanding of the human condition from multiple perspectives. We emphasize hands-on, experiential learning in methodology and research—as well as in traditional content and analysis—at all curriculum levels.

The faculty of the Department of Humanities and Social Sciences are committed to the educational mission of YSU and to enhancing the lives of YSU students and the wider community. Faculty in the department are engaged in important and impactful research on historical and contemporary social, ethical, and environmental issues. They also serve pivotal roles as officers in the regional and national organizations associated with their fields of expertise and offer that expertise in service to local, national, and global communities. For example, you will find members of our department active in curating museum exhibits, serving on Ethics Boards in local hospitals, speaking before Congress, commenting on local and national politics, listing and curating important historical sites, on archeological digs in multiple countries, helping local and regional coroners, and helping to plan the cities we call home. We offer a large variety of courses; regularly bring speakers to campus; have multiple student organizations; and are the home for many centers with a variety of focus areas.

We invite you to learn more about the diverse areas we represent at YSU by taking a look at our specific programs below. If you have even been motivated to look into the following questions, you are in the right place.

- How did we get to now and how can that knowledge help us in the future?
- What is the proper role of government?
- How should we understand the space in which we all operate?
- How do groups of people relate?
- What is it to be Human?
- What role does religion play in our lives and how does it impact the decisions we make?
- What is the right thing to do?
- What is our role in government in a democratic society?
- How can we create a more equitable community?
- How should we address social injustices?
- What forms of activism are most effective in creating change?
- How can I best serve my local, national, and global communities?

We look forward to talking with you and seeing you in our courses.

- Alan Tomhave, Chair, Department of Humanities and Social Sciences

**Departmental Majors**

More information can be found about the department by looking at the specific programs we encompass:

- Anthropology and Sociology
- Geography and Urban Studies
- History
- Philosophy and Religious Studies
- Politics and International Relations
- Master's Programs:
  - American Studies
  - History

**Contact Information**

Alan Tomhave, Department Chair – aetomhave@ysu.edu – (330) 941-3447

Rosa Vega, Administrative Assistant – rmvega@ysu.edu – (330) 941-3456

520 DeBartolo Hall
(330) 941-3456
Geography and Urban-Regional Studies

Introduction

Students majoring in Geography earn the Bachelor of Arts degree, which may be taken in one of two tracks: Geography BA and Geography BA-GIScience/Remote Sensing Track. In addition to completing the University and CLASS requirements, a student majoring in Geography must complete a minimum of 33 semester hours in Geography. The GIScience/Remote Sensing Track requires an additional nine semester hours of support courses. At least 21 semester hours must be earned in upper-division Geography courses. Grades for courses required in the major must be a minimum of "C" or higher. The B.A. degree requires both a minor of at least 18 s.h. and a foreign language through the 2600-level course. This degree may be earned in eight semesters if students average 15 hours per semester.

Welcome from the Program Coordinator

Welcome! We invite you to explore the exciting and evolving field of geography! We offer a diverse curriculum that fits the interests and needs of students who have a broad outlook on life. Geography offers an alternative that can be employed for the pursuit of many unique and different career paths. We also provide extensive training in the fast growing field of Geographic Information Science. This technology is being employed in virtually every public and private sector of the economy. Our graduates are employed in environmental and urban planning agencies. They serve in areas that focus on ensuring the security interests of the United States. They have been admitted to graduate programs throughout the United States. Please contact me if you have any questions about the field of geography and how it can apply to your long-term career interests.

Ron Shaklee, Ph.D.
Professor and Program Coordinator

Contact Information

Ron Shaklee, Program Coordinator - rshaklee@ysu.edu - (330) 941-3319
Rosa Vega, Administrative Assistant - rmvega@ysu.edu - (330) 941-3456
124 Phelps Building
(330) 941-3317

Advising

All majors should meet with an advisor each semester prior to registering for their classes. Course selection is a critical part of finishing your degree in a timely manner.

Students pursuing a BA in Geography are advised by the Program Coordinator of Geography and Urban-Regional Studies or by any appropriate member of the faculty whose academic expertise coincides with the interests of the student. Call (330) 941-3317 to set up an appointment to meet with the Program Coordinator. Geography majors who need to submit repetition forms, study abroad forms, and transient forms or who need to request a graduation evaluation should contact the BCLASSE Division of Academic Advising at (330) 941-3413 (visit the BCLASSE Advising website (http://www.ysu.edu/academics/college-liberal-arts-social-sciences/class-advisement/)).

Geography Minors

Five minors in Geography are offered:

- General Geography
- Geographic Information Science
- Environmental Geography
- Human Geography
- Regional Geography

Each requires 18 s.h. of courses with at least one-third of the credit earned at the upper-division level.

Professor

William R. Buckler, Ph.D., Associate Professor
Craig S. Campbell, Ph.D., Professor
Dawna Lynn Cerney, Ph.D., Associate Professor
Peter Kimosop, Ph.D., Associate Professor
Ronald V. Shaklee, Ph.D., Professor
Bradley A. Shellito, Ph.D., Professor

Majors

- BA in Geography (p. 206)
- BA in Geography GIS/Remote Sensing Track (p. 208)
- Spatial Information Systems (SIS) Individualized Curriculum Program (ICP) (p. 210)

Minors

- General Geography (p. 212)
- Environmental Geography (p. 211)
- Geographic Information Systems (p. 211)
- Human Geography (p. 211)
- Regional Geography (p. 212)

Certificates

- Geospatial Science and Technology (p. 209)

GEOG 1503  Physical Geography  3 s.h.
An introductory analysis of selected elements of the natural habitat and their geographic distribution. Includes processes involved in weather, climates, soils, vegetation, and landforms.
Gen Ed: Natural Science.

GEOG 1503L Physical Geography Laboratory  1 s.h.
Observation, collection and analysis of data pertaining to the Earth's weather and climate, surface landforms, drainage systems, soils, vegetation and changing global environmental conditions. In-class labs, local field excursions, and web-based assignments enable students to investigate these phenomena using the scientific method. The class meets two hours each week. Optional lab to accompany GEOG 1503.
Prereq.: GEOG 1503 or concurrent with GEOG 1503.
Gen Ed: Natural Science.

GEOG 2610  Map Use and Interpretation  3 s.h.
The use of maps, aerial photography, and satellite imagery to depict physical and cultural landscapes. Topics include map elements and how to locate, read, and interpret maps and remotely-sensed imagery.

GEOG 2611  Geospatial Foundations  3 s.h.
An overview of geospatial science and technology, including introductory concepts in spatial analysis, Geographic Information Systems, remote sensing, and GPS. The class provides a survey of theoretical geospatial topics as well as their applications in a computer lab setting.

GEOG 2611H  Honors Geospatial Foundations  3 s.h.
An overview of geospatial science and technology, including introductory concepts in spatial analysis, Geographic Information Systems, remote sensing, and GPS. The class provides a survey of theoretical geospatial topics as well as their applications in a computer lab setting.
GEOG 2626  World Geography  3 s.h.
A comparative study of representative regions of the world. Attention is focused on an examination of the physical, cultural, social and political attributes of selected regions. **Gen Ed:** International Perspectives, Social Science, Social and Personal Awareness.

GEOG 2630  Weather  3 s.h.
An examination of basic weather elements, their interrelationships and the natural laws that govern them. Focus is on both global scale atmospheric processes and localized factors that influence weather conditions and patterns. **Gen Ed:** Natural Science.

GEOG 2630L  Weather Lab  1 s.h.
Students observe, collect and analyze atmospheric data, and determine and predict weather conditions. Atmospheric laws and meteorological principles, concepts, and processes are investigated using the scientific method. Weekly investigations are undertaken in this hybrid lab encompassing in-class and online instructions. The class meets in person as needed for guidance. Optional lab to accompany GEOG 2630: Weather. **Prereq.:** GEOG 2630 or concurrently with GEOG 2630.

GEOG 2640  Human Geography  3 s.h.
An examination of the place to place variation in people's utilization of the earth. Topics include the distribution of people, spatial variations in culture, urbanization and politicization of space. **Gen Ed:** International Perspectives, Social Science, Social and Personal Awareness.

GEOG 2650  Global Economic Landscapes  3 s.h.
Geographic patterns of economic activities such as agriculture, manufacturing, retailing and services, and regional patterns and issues in the emerging global economy. **Gen Ed:** International Perspectives, Social Science, Social and Personal Awareness.

GEOG 3701  Introduction to Geographic Information Science  3 s.h.
Introduction to the principles of collection, storage, manipulation, retrieval, analysis and visualization of spatial data in a computer environment. Credit will not be given for GEOG 3701 if a student has already received credit for GEOG 5810. **Prereq.:** GEOG 2611.

GEOG 3702  Introduction to Remote Sensing  3 s.h.
Analysis and interpretation of earth features from both airborne and satellite observation platforms. Topics include photogrammetry, digital data manipulation, multispectral imagery analysis, and interpretation of environmental features. Credit will not be given for GEOG 3702 if a student has already received credit for GEOG 5805. **Prereq.:** GEOG 2611.

GEOG 3703  Human Impacts on the Environment  3 s.h.
Focus is on the interaction between natural systems and human activities that result in environmental change and degradation of the Earth's atmosphere, waters, soil, vegetation, and animal life. Societal conflicts, mitigation, conservation, and sustainable resource strategies are discussed. **Prereq.:** GEOG 1503 or GEOL 1504 or GEOL 1505 or ENST 1500 or ENST 2600 or HIST 3774.

GEOG 3705  Mountain Geography  3 s.h.
Investigates the physical, biological, and cultural processes that take place in selected mountain environments. Topics also include resource use, environmental change, and sustainable development at both regional and global scales. **Prereq.:** BIOL 1505 or ENST 1500 or ENST 2600 or GEOG 1503 or GEOL 1504 or GEOL 1505.

GEOG 3712  Thematic Map Design and Symbolization  3 s.h.
An introduction to cartographic design. Emphasis is on composition elements and the construction and perception of point, line, and area map symbols. The use of color, statistical techniques, and animated maps are also explored. **Prereq.:** GEOG 2610 or GEOG 2611 or GEOG 2626 or GEOG 2640.

GEOG 3713  Geography of South America  3 s.h.
Spatial patterns found in the physical and cultural landscapes of South America. **Prereq.:** GEOG 2626 or GEOG 2640; or HIST 3728.

GEOG 3715  Geography of Middle America  3 s.h.
Spatial patterns found in the physical and cultural landscapes of Middle America (Mexico, Central America, and the Caribbean). **Prereq.:** GEOG 2626 or GEOG 2640; or HIST 3727.

GEOG 3717  Geography of Europe  3 s.h.
Spatial patterns found in the physical and cultural landscapes of Europe. **Prereq.:** GEOG 2626 or GEOG 2640.

GEOG 3719  Geography of the United States  3 s.h.
Spatial patterns found in the physical and cultural landscapes of the United States. **Prereq.:** GEOG 2626 or GEOG 2640; or HIST 2605 or HIST 2606.

GEOG 3721  Geography of Ohio  3 s.h.
Spatial patterns found in the physical and cultural landscapes of Ohio. **Prereq.:** GEOG 2626 or GEOG 2640; or HIST 2605 or HIST 2606 or HIST 3748.

GEOG 3724  Themes in Cultural Geography  3 s.h.
A seminar focusing on cultural traditions in geography in the United States. Primary focus is on scholars, traditions, theory and methodology of cultural geography as published in the professional literature. **Prereq.:** GEOG 2626 or GEOG 2640 or ANTH 1500 or SOC 1500.

GEOG 3726  Urban Geography  3 s.h.
A study of the changing spatial patterns associated with the rise of urbanization, comparative urban developments and cities as a part of the urban system. **Prereq.:** GEOG 2626 or GEOG 2640; or HIST 3736; or SOC 3707.

GEOG 3730  Global Climates  3 s.h.
Focus is on the scientific foundations of Earth's climate system; basic understanding of climate behavior, patterns, variability and change; contributions of human activities to climate change; and societal vulnerabilities and responses to climate variability and change. **Prereq.:** GEOG 1503 or GEOG 2630 or permission of instructor.

GEOG 3733  Severe and Hazardous Weather  3 s.h.
Focus is on severe weather that may threaten harm to life and/or property. The scientific underpinning of severe weather types and their geographic distributions, hazards, and mitigation measures. Topics include extratropical cyclones; thunderstorms; lightning; tornadoes; hurricanes; floods; droughts; cold and heat waves; blizzards; snow, ice and wind storms; and El Nino/La Nina. **Prereq.:** GEOG 1503 or GEOG 2630.

GEOG 3735  Water in the Earth System  3 s.h.
Focus is on the cycling of water within the Earth system. Covers the unique properties of water, the global water cycle, the distribution of water within the various reservoirs of the hydrosphere, the role of water in energy transfer and systems interactions, and human impacts on water resources. **Prereq.:** GEOG 1503 or GEOG 2630; or GEOL 1504 or GEOL 1505 or GEOL 2602; or ENST 1500 or ENST 2600.

GEOG 3737  Soils and Land Use  3 s.h.
Examination of soil characteristics influencing land use planning and development. Topics include the basic physical and chemical properties of soil, soil water, the soil-forming factors, the use and interpretation of county soil reports, and soil characteristics beneficial and detrimental to selected land use practices. Participation in field trips is required. **Prereq.:** GEOG 1503; or GEOL 1504 or GEOL 1505; or ENST 2600; high school chemistry recommended.

GEOG 3741  Transportation Geography  3 s.h.
Spatial properties of interregional and intraregional transportation. Topics include network development, movement patterns of people and commodities and the impact of transportation on other activities. **Prereq.:** GEOG 2626 or GEOG 2640 or GEOG 2650 or GEOG 3745.
GEOG 3745  The Automobile in American Culture  3 s.h.
The impact of the automobile on the economic, cultural and environmental landscapes of the United States from a geographic standpoint. 
**Prereq.:** GEOG 2640 or GEOG 2650 or GEOG 3741.

GEOG 3750  Topics in Regional Geography  3 s.h.
Application of the regional method to selected areas of the world. Topic is announced each time the course is offered. May be repeated three times for credit if content is not repeated. Maximum credit 9 s.h. 
**Prereq.:** GEOG 2626 or GEOG 2640.

GEOG 3775  Field Methods in Geography  3 s.h.
Practical experiences in geographic data collection. Emphasis on applying techniques of observation, sampling, surveying, interviewing and mapping to both physical and human spatial phenomena. Participation in field trips is mandatory. 
**Prereq.:** GEOG 1503 or GEOG 2610 or GEOG 2640.

GEOG 3780  Medical Geography  3 s.h.
A geographical and epidemiological approach to disease study. Examines the diffusion and distribution of illnesses and the social and environmental factors contributing to their occurrence. Global disease trends, health care issues and development are explored and compared. 
**Prereq.:** GEOG 2626 or GEOG 2640 or ANTH 1500 or BIOL 2602 or SOC 1500.

GEOG 3781  GIS Applications for the Social Sciences  3 s.h.
Applications of Geographic Information Science (GIS) techniques for the social sciences in disciplines such as economics, sociology, anthropology, political science, and urban/cultural geography. As distinct from physical or environmental sciences. Focus is on the integration of a spatial perspective in social research, analysis and policy development and how GIS can be useful for collecting and analyzing both qualitative and quantitative data. 
**Prereq.:** GEOG 2611.

GEOG 3782  GIS Applications for the Natural Sciences  3 s.h.
Applications of Geographic Information Science (GIS) techniques for the natural sciences in disciplines such as physical geography, ecology, biology, ecology, natural hazards, environmental monitoring, planning and infrastructure, water resources, climate change, and energy. Topics range from spatial data quality, data conversion, database design, data management, analysis, and visualization. 
**Prereq.:** GEOG 2611.

GEOG 3783  GIS Applications in Urban-Regional Studies  3 s.h.
The application of Geographic Information Systems (GIS) issues involved in urban and regional studies, such as economic development, housing development and redevelopment, neighborhood rehabilitation, city planning, rural planning, zoning decisions, and transportation planning. The course is designed to provide planners and developers with an analytical skill set for collecting and analyzing both quantitative and qualitative spatial data. Two hours of lecture each week and two structured hours of lab each week. 
**Prereq.:** GEOG 2611.

GEOG 4801  Advanced Geographic Information Science  3 s.h.
A continuation of Introduction to Geographic Information Science focusing on theory and application of advanced techniques in spatial data handling, GIS modeling, and spatial analysis. Credit will not be given for GEOG 4801 if a student has already received credit for GEOG 5811. 3 s.h. 
**Prereq.:** GEOG 3701 or GEOG 5810.

GEOG 4802  Advanced Remote Sensing  3 s.h.
A continuation of Introduction to Remote Sensing focusing on advanced theory of image classification, image processing and enhancement, and methods of spatial analysis. Credit will not be given for GEOG 4802 if a student has already received credit for GEOG 5806. 
**Prereq.:** GEOG 3702 or GEOG 5805.

GEOG 4825  Geography Internship  1-3 s.h.
Practical application of geographic principles and skills in the public or private workplace. A minimum of 40 clock hours per credit hour per semester is required in the work setting. An activities log must be maintained and oral and written reports of the internship experience are required. May be repeated for up to 6 s.h. By permit only. 
**Prereq.:** 3 s.h. upper-division geography.

GEOG 4840  Seminar in Geography  3 s.h.
Selected aspects of geography not covered in existing courses. Topic to be announced each time the course is offered. May be taken up to two times for credit if topic is not repeated. 
**Prereq.:** 9 s.h. of geography.

GEOG 4840D  Seminar in Geography Ohio and the 2020 Election  3 s.h.
Selected aspects of geography not covered in existing courses. Topic to be announced each time the course is offered. May be taken up to two times for credit if topic is not repeated. 
**Prereq.:** 9 s.h. of geography.

GEOG 4840E  Seminar in Geography: Ohio in Next Ten Years  3 s.h.
Selected aspects of geography not covered in existing courses. Topic to be announced each time the course is offered. May be taken up to two times for credit if topic is not repeated. 
**Prereq.:** 9 s.h. of geography.

GEOG 4890  Geography Capstone  3 s.h.
Investigation of research topics, methods, and issues in geography. Students select a geographic research topic, collect and analyze data using appropriate methods and present findings in oral and written form. 
**Gen Ed:** Capstone.

GEOG 5802  Biogeography  3 s.h.
The distribution and scale of flora and fauna and the factors and processes that produce these patterns. Topics also include disturbance events, dispersal, colonization and invasion, and biological hierarchy. 
**Prereq.:** BIOL 1505 or BIOL 2602 or GEOG 1503.

GEOG 5805  Remote Sensing 1  3 s.h.
Analysis and interpretation of earth features from both airborne and satellite observation platforms. Themes include photogrammetry, digital data manipulation, multispectral imagery, and interpretation of environmental features. Not available to students who have taken GEOG 3710. 
**Prereq.:** GEOG 2610 or GEOG 2611 or GEOG 3712; and Junior standing.

GEOG 5806  Remote Sensing 2  3 s.h.
A continuation of Remote Sensing 1; focusing on advanced theory of image classification, image processing and enhancement, and spatial analytical methods. 
**Prereq.:** GEOG 5805.

GEOG 5810  Geographic Information Science 1  3 s.h.
Introduction to the principles of collection, storage, manipulation, retrieval, analysis and visualization of spatial data in a computer environment. Not available to students who have taken GEOG 3732. 
**Prereq.:** GEOG 2610 or GEOG 2611 or GEOG 3712; and Junior standing.

GEOG 5811  Geographic Information Science 2  3 s.h.
A continuation of GIScience 1 focusing on theory and application of advanced techniques in spatial data handling, modeling, and spatial analysis. Not available to students who have taken GEOG 3765. 
**Prereq.:** GEOG 5810.
Bachelor of Arts in Geography

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<tr>
<th>COURSE</th>
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<tr>
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<td>Writing 1 with Support</td>
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<td>ENGL 1551</td>
<td>Writing 2</td>
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<td>CMST 1545</td>
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<td>or MATH 262</td>
<td>Quantitative Reasoning</td>
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Some courses are categorized in more than one knowledge domain. Courses can only be used once within the General Education model.

**Arts and Humanities (6 s.h.)** | 6 |
**Natural Sciences (2 courses, 1 with lab) (6-7 s.h.)** | |
**GEOG 1503** | Physical Geography | 3 |
**Natural Science elective with lab** | 4 |
**Social Science (6 s.h.)** | |
**GEOG 2626** | World Geography | 3 |
**GEOG 2640** | Human Geography | 3 |
**Social Science elective** | 3 |
**Social and Personal Awareness (6 s.h.)** | 6 |

**Foreign Language Requirement** | |
**FNLG 1550** | Elementary Foreign Language | 4 |
**FNLG 2600** | Intermediate Foreign Language | 4 |

**Required Major Courses (6 s.h.):** | 6 |
At least 21 s.h. of GEOG courses must be at the 3700-level or above. Grade of C or better is required. Courses cannot be taken CR/NC and cannot count towards both the major and minor.

**GEOG 1503** | Physical Geography |
**GEOG 4890** | Geography Capstone |
<table>
<thead>
<tr>
<th>Year 2</th>
<th>Fall</th>
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<tbody>
<tr>
<td>GEOG 37XX-level Geography Regional course</td>
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<td>Spring</td>
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<tr>
<td>GEOG 3701 Introduction to Geographic Information Science</td>
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<td>GEOG 3702 Introduction to Remote Sensing</td>
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<td>CMST 1545 Communication Foundations</td>
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**BA in Geography Without GIScience Certificate**

**Suggested 4-Year Semester Plan**

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<td>ENGL 1550 Writing 1</td>
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<td><strong>Semester Hours</strong></td>
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<td>Geographic Skill 37XX/58XX course</td>
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<td>Geography Elective 37XX-level course</td>
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<td>CMST 1545 Communication Foundations</td>
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**MATH 1510 College Algebra**

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<tbody>
<tr>
<td>FNLG 1550 or MATH 2623</td>
<td>Elementary Foreign Language or Quantitative Reasoning</td>
<td>4</td>
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<tr>
<td>LASS 1510</td>
<td>Exploring Critical Questions in LASS</td>
<td>3</td>
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<tr>
<td>ENGL 1551</td>
<td>Writing 2</td>
<td>3</td>
</tr>
<tr>
<td>FNLG 2600</td>
<td>Intermediate Foreign Language</td>
<td>4</td>
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**BA in Geography Without GIScience Certificate**

**Suggested 4-Year Semester Plan**

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<tr>
<td>GEOG 37XX Geography Regional Course</td>
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**MATH 1510 College Algebra**

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</table>
Learning Outcomes
Geography majors, upon fulfilling the requirements of the major, will:

- Demonstrate understanding of the fundamental themes of human and physical geography: region, movement, human/environmental interaction, landscape, and place.
- Demonstrate understanding of spatial patterns and processes in the human and physical environment.
- Effectively use, analyze, and interpret maps and other graphic representations of geographic information.
- Be proficient in geographic methods and techniques such as cartography, GIScience, remote sensing, and field methods.
- Effectively communicate geographic information in written and oral forms.
- Complete a research proposal that requires synthesis of relevant literature and development of a viable geographic research project.

Bachelor of Arts in Geography-GIS/RS Track

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<td>Stat Lit and Crit Reasoning</td>
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</tr>
<tr>
<td>Some courses are categorized in more than one knowledge domain. Courses can only be used once within the General Education model.</td>
<td></td>
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</tr>
<tr>
<td>Arts and Humanities (6 s.h.)</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Natural Sciences (2 courses, 1 with lab) (6-7 s.h.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEOG 1503</td>
<td>Physical Geography (required for major)</td>
<td>3</td>
</tr>
<tr>
<td>Natural Science elective</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Science (6 s.h.)</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>GEOG 2626</td>
<td>World Geography</td>
<td>3</td>
</tr>
<tr>
<td>or GEOG 2640</td>
<td>Human Geography</td>
<td></td>
</tr>
<tr>
<td>Social Science elective</td>
<td></td>
<td>3</td>
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<tr>
<td>Social and Personal Awareness (6 s.h.)</td>
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<tr>
<td>Foreign Language Requirement</td>
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<td>FNLG 1550</td>
<td>Elementary Foreign Language</td>
<td>4</td>
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<tr>
<td>FNLG 2600</td>
<td>Intermediate Foreign Language</td>
<td>4</td>
</tr>
<tr>
<td>MAJOR REQUIREMENTS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>At least 21 s.h. of GEOG courses must be at the 3700-level or above. Grade of C or better is required. Courses cannot be taken CR/NC and cannot count towards both the major and minor.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEOG 1503</td>
<td>Physical Geography</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 2611</td>
<td>Geospatial Foundations</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 3701</td>
<td>Introduction to Geographic Information Science</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 3702</td>
<td>Introduction to Remote Sensing</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 4890</td>
<td>Geography Capstone</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following courses (3 s.h.):</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GEOG 2626</td>
<td>World Geography</td>
<td></td>
</tr>
<tr>
<td>GEOG 2640</td>
<td>Human Geography</td>
<td></td>
</tr>
<tr>
<td>Regional Geography - Select one course from the following (3 s.h.):</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GEOG 3713</td>
<td>Geography of South America</td>
<td></td>
</tr>
<tr>
<td>GEOG 3715</td>
<td>Geography of Middle America</td>
<td></td>
</tr>
<tr>
<td>GEOG 3717</td>
<td>Geography of Europe</td>
<td></td>
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<tr>
<td>GEOG 3719</td>
<td>Geography of the United States</td>
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</tr>
<tr>
<td>GEOG 3721</td>
<td>Geography of Ohio</td>
<td></td>
</tr>
<tr>
<td>GEOG 3750</td>
<td>Topics in Regional Geography</td>
<td></td>
</tr>
<tr>
<td>GEOG 5850</td>
<td>International Area Study</td>
<td></td>
</tr>
<tr>
<td>Select one course from the following (3 s.h.):</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GEOG 4801</td>
<td>Advanced Geographic Information Science</td>
<td></td>
</tr>
<tr>
<td>GEOG 4802</td>
<td>Advanced Remote Sensing</td>
<td></td>
</tr>
<tr>
<td>Select two additional courses from the following (6 s.h.):</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>GEOG 3712</td>
<td>Thematic Map Design and Symbolization</td>
<td></td>
</tr>
<tr>
<td>GEOG 3775</td>
<td>Field Methods in Geography</td>
<td></td>
</tr>
<tr>
<td>GEOG 3781</td>
<td>GIS Applications for the Social Sciences</td>
<td></td>
</tr>
<tr>
<td>GEOG 3782</td>
<td>GIS Applications for the Natural Sciences</td>
<td></td>
</tr>
<tr>
<td>GEOG 4801</td>
<td>Advanced Geographic Information Science</td>
<td></td>
</tr>
<tr>
<td>GEOG 4802</td>
<td>Advanced Remote Sensing</td>
<td></td>
</tr>
<tr>
<td>GEOG 4825</td>
<td>Geography Internship</td>
<td></td>
</tr>
<tr>
<td>GEOG 4840</td>
<td>Seminar in Geography</td>
<td></td>
</tr>
<tr>
<td>GEOG 5812</td>
<td>Global Positioning Systems and GIScience</td>
<td></td>
</tr>
<tr>
<td>GEOG 5814</td>
<td>3D Modeling and GIS</td>
<td></td>
</tr>
<tr>
<td>GEOG 5820</td>
<td>Directed Research in Geography</td>
<td></td>
</tr>
<tr>
<td>Select one 3 s.h. GEOG course at the 3700-level or higher</td>
<td></td>
<td></td>
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<tr>
<td>Four Required Support Courses (12-13 s.h.):</td>
<td></td>
<td>3-4</td>
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<tr>
<td>CSIS 1590</td>
<td>Survey of Computer Science and Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>CSIS 1595</td>
<td>Fundamentals of Programming and Problem-Solving</td>
<td>3</td>
</tr>
<tr>
<td>CSIS 3722</td>
<td>Development of Databases</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following courses which satisfies the General Education MATH requirement:</td>
<td></td>
<td>3-4</td>
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<tr>
<td>STAT 2601</td>
<td>Introductory Statistics</td>
<td></td>
</tr>
<tr>
<td>STAT 2625</td>
<td>Stat Lit and Crit Reasoning</td>
<td></td>
</tr>
<tr>
<td>MATH 2623</td>
<td>Quantitative Reasoning</td>
<td></td>
</tr>
<tr>
<td>Minor</td>
<td></td>
<td>18</td>
</tr>
<tr>
<td>Electives to meet 120 hours</td>
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<td>8</td>
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<tr>
<td>Total Semester Hours</td>
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Year 1

<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>Spring</td>
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<tr>
<td>ENGL 1551</td>
<td>Writing 2</td>
</tr>
<tr>
<td>FNLG 2600</td>
<td>Intermediate Foreign Language</td>
</tr>
<tr>
<td>GEOG 2611</td>
<td>Geospatial Foundations</td>
</tr>
<tr>
<td>GEOG 2626</td>
<td>World Geography</td>
</tr>
<tr>
<td>or GEOG 2640</td>
<td>Human Geography</td>
</tr>
<tr>
<td>Arts and Humanities 15XX/26XX Course</td>
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<tr>
<td>Total Semester Hours</td>
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</table>

Fall

<table>
<thead>
<tr>
<th></th>
<th>S.H.</th>
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</thead>
<tbody>
<tr>
<td>YSU 1500</td>
<td>Success Seminar</td>
</tr>
</tbody>
</table>
ENGL 1550  Writing 1 or ENGL 1549 or Writing 1 with Support 3–4
GEOG 1503  Physical Geography 3
Mathematics Requirement 3–4
  STAT 2601  Introductory Statistics
  or STAT 2625  Stat Lit and Crit Reasoning
  or MATH 2623  Quantitative Reasoning
FNLG 1550  Elementary Foreign Language 4

Semester Hours 14–16

**Year 2**

**Spring**
- Social and Personal Awareness 15XX/26XX- level course 3
- Minor 15XX/26XX- level course 3
- Arts and Humanities 15XX/26XX level course 3
- CSIS 1595  Fundamentals of Programming and Problem-Solving 1 3
- GEOG 37XX Regional Geography Elective 3

Semester Hours 15

**Fall**
- GEOG 3701  Introduction to Geographic Information Science 3
- GEOG 3702  Introduction to Remote Sensing 3
- Social Science 15XX/26XX course 3
- Natural Science 15XX/26XX level course w/lab 4
- CSIS 1590  Survey of Computer Science and Information Systems 3

Semester Hours 16

**Year 3**

**Spring**
- Minor 15XX/26XX- level course 3
- GEOG Elective 37XX/48XX- level course 3
- Minor 15XX/26XX- level course 3
- Minor 15XX/26XX- level course 3
- Elective 37XX/48XX- level course 3

Semester Hours 15

**Fall**
- CMST 1545  Communication Foundations 3
- GEOG 4801  Advanced Geographic Information Science or GEOG 4802 or Advanced Remote Sensing 3
- Social Science 15XX/26XX course 3
- Social and Personal Awareness 15XX/26XX- level course 3
- CSIS 3722  Development of Databases 3

Semester Hours 15

**Year 4**

**Spring**
- Minor 37XX/48XX- level course 3
- GEOG 37XX- level or higher elective 3
- GIS Elective GEOG 37XX/48XX/58XX- level course 3
- Elective 37XX/48XX- level course 3
- Elective 37XX/48XX- level course 3

Semester Hours 15

**Fall**
- GEOG 4890  Geography Capstone 3
- Minor 37XX/48XX- level course 3
- GIS Elective GEOG 37XX/48XX/58XX- level course 3

Semester Hours 15

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 2611</td>
<td>Geospatial Foundations</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 3701</td>
<td>Introduction to Geographic Information Science</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 3702</td>
<td>Introduction to Remote Sensing</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 4801</td>
<td>Advanced Geographic Information Science</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 4802</td>
<td>Advanced Remote Sensing</td>
<td>3</td>
</tr>
</tbody>
</table>

Select one course from the following (3 s.h.):
- GEOG 3712  Thematic Map Design and Symbolization
- GEOG 3775  Field Methods in Geography
- GEOG 3781  GIS Applications for the Social Sciences
- GEOG 3782  GIS Applications for the Natural Sciences
- GEOG 4825  Geography Internship 1

Learning Outcomes

Geography majors, upon fulfilling the requirements of the major, will:

- Demonstrate understanding of the fundamental themes of human and physical geography: region, movement, human/environmental interaction, landscape, and place.
- Demonstrate understanding of spatial patterns and processes in the human and physical environment.
- Effectively use, analyze, and interpret maps and other graphic representations of geographic information.
- Be proficient in geographic methods and techniques such as cartography, GIScience, remote sensing, and field methods.
- Effectively communicate geographic information in written and oral forms.
- Complete a research proposal that requires synthesis of relevant literature and development of a viable geographic research project.

In addition to the above, students completing the GIS/RS Track or a Certificate in Geospatial Science and Technology will:

- Demonstrate proficiency in one or more applications of geospatial technology: geographic information systems, global positioning systems, and remote sensing.

Certificate in Geospatial Science and Technology (GSAT)

The certificate in Geospatial Science and Technology provides a program for students and professionals interested in geospatial careers and technologies (including Geographic Information Science, Remote Sensing, the Global Positioning System, Cartography, and spatial data handling and analysis). The Certificate signifies academic proficiency in Geospatial Science and Technology and is administered by the Department of Humanities and Social Sciences. It is rendered upon completion of the requirements below and includes both a physical copy of the certificate plus an entry on student transcripts.

Students must take a minimum of 18 s.h. (6 courses) as listed below and complete them with a cumulative GPA of 3.00 (B) or higher and no course grade below a C. The certificate is available to undergraduates and non-degree seeking professionals who meet course requirements. Note that some classes may require prerequisites courses for entrance.

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 2611</td>
<td>Geospatial Foundations</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 3701</td>
<td>Introduction to Geographic Information Science</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 3702</td>
<td>Introduction to Remote Sensing</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 4801</td>
<td>Advanced Geographic Information Science</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 4802</td>
<td>Advanced Remote Sensing</td>
<td>3</td>
</tr>
</tbody>
</table>

Select two elective courses from the following (6-7 s.h.):
- GEOG 3712  Thematic Map Design and Symbolization
- GEOG 3775  Field Methods in Geography
- GEOG 3781  GIS Applications for the Social Sciences
- GEOG 3782  GIS Applications for the Natural Sciences
- GEOG 4825  Geography Internship 1
Learning Outcomes

The department offers a Certificate in Geospatial Science and Technology. The certificate represents academic proficiency for career-oriented students and professionals in the geospatial field to include geographic information science, remote sensing, global positioning systems, cartography, and spatial data handling and analysis. It is rendered upon completion of the requirements and includes a physical copy of the certificate and entry on the student’s transcript.

Learning Outcomes

Students, upon fulfilling the requirements of the Certificate in Geospatial Science and Technology (GSAT), will:

• Effectively use, analyze, and interpret maps and other graphic representations of geographic information.
• Be proficient in geographic methods and techniques such as cartography, GIScience, remote sensing, and field methods.
• Effectively communicate geographic information in written and oral forms.

Demonstrate proficiency in one or more applications of geospatial technology – geographic information systems, global positional systems, and remote sensing.

Spatial Information Systems (SIS) Individualized Curriculum Program (ICP)

In addition to offering the Geography major, the department coordinates an Individualized Curriculum Program (ICP) in Spatial Information Systems that combines courses in Geography and Computer Science and Information Systems, which leads to a Bachelor of Applied Science degree. A foreign language is not required to complete this degree.

The program is focused on three areas:

• Geography
• Computer Science and Information Systems
• Specialty electives

Required GEOG and CSIS courses are specified on the Curriculum Sheet.

Learning Outcomes

Spatial Information Systems majors, upon fulfilling the requirements of the major will:

• Demonstrate understanding of spatial patterns and processes in the human and physical environments.
• Demonstrate proficiency in one or more applications of geospatial technology – Geographic Information Systems, Global Positioning Systems and/or Remote Sensing.
• Complete a research proposal that requires synthesis relevant literature and development of a viable geographic research project.

Total hours required for the SIS ICP degree is 124 s.h. of which at least 48 s.h. must be at the 3000-level or higher. No minor or foreign language is required for this degree.

COURSE TITLE S.H.
FIRST YEAR REQUIREMENT -STUDENT SUCCESS
YSU 1500 Success Seminar 1:2
or SS 1500
or HONR 1500
Intro to Honors

General Education Requirements

ENGL 1550 Writing 1 3
ENGL 1551 Writing 2 3
CMST 1545 Communication Foundations 3
Mathematics Requirement 3
Arts and Humanities courses 6
Natural Science 4
GEOG 1503 meets 3 s.h. of Natural Science Requirement
Social Science 3
GEOG 2626 or GEOG 2640 meet 3 s.h. of the Social Scuience
Social and Personal Awareness 6

Required Geography Core Courses

GEOG 1503 Physical Geography 3
GEOG 4890 Geography Capstone 3
GEOG 2610 Map Use and Interpretation 3
or GEOG 2611 Geospatial Foundations 3
GEOG 2626 World Geography 3
or GEOG 2640 Human Geography 3

Required Geospatial Core Courses

GEOG 3701 Introduction to Geographic Information Science 3
GEOG 3702 Introduction to Remote Sensing 3
GEOG 4801 Advanced Geographic Information Science 3
GEOG 5812 Global Positioning Systems and GIScience 3

Required Complementary Skill Courses

DDT 1505 CAD Technology 1 4
ENGL 3743 Professional and Technical Writing 3

Required CSIS Core Courses

CSIS 1590 Survey of Computer Science and Information Systems 3
CSIS 2610 Programming and Problem-Solving 4
CSIS 3726 Visual/Object-Oriented Programming 4
CSIS 3722 Development of Databases 3

Select at least 6 s.h. from the following CSIS/CSCI Info elective courses: 6-8

CSIS 3760 Electronic Commerce Programming
CSIS 4822 Database Applications
CSIS 5824 Applied Artificial Intelligence
CSIS 5838 Graphics and Animation for Gaming
CSCI 5895 Special Topics (with approval of the chairperson)
INFO 3774 Multimedia Technology
INFO 3775 Multimedia Authoring

Select at least 6 s.h. from the following GEOG elective courses with approval of the chairperson: 6

GEOG 3712 Thematic Map Design and Symbolization

---

1. These courses are allowed for credit in the GSAT certificate only if they contain a significant Geospatial Science and Technology related component, are taken for 3 s.h. of credit, and are given approval by the chairperson.
2. These courses are allowed to count for elective credit only if they have not been taken under required courses.
### Minor in Human Geography

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
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<tbody>
<tr>
<td>GEOG 2640</td>
<td>Human Geography</td>
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<tr>
<td>Select 3 s.h. from the following courses:</td>
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</tr>
<tr>
<td>GEOG 2610</td>
<td>Map Use and Interpretation</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 2611</td>
<td>Geospatial Foundations</td>
<td></td>
</tr>
<tr>
<td>Select 12 s.h. from the following courses with 6 s.h. being upper-division (3700+)</td>
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<td>12</td>
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<tr>
<td>GEOG 2626</td>
<td>World Geography</td>
<td></td>
</tr>
<tr>
<td>GEOG 2650</td>
<td>Global Economic Landscapes</td>
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</tr>
<tr>
<td>GEOG 3701</td>
<td>Introduction to Geographic Information Science</td>
<td></td>
</tr>
<tr>
<td>GEOG 3712</td>
<td>Thematic Map Design and Symbolization</td>
<td></td>
</tr>
<tr>
<td>GEOG 3726</td>
<td>Urban Geography</td>
<td></td>
</tr>
<tr>
<td>GEOG 3745</td>
<td>The Automobile in American Culture</td>
<td></td>
</tr>
<tr>
<td>GEOG 3780</td>
<td>Medical Geography</td>
<td></td>
</tr>
<tr>
<td>GEOG 5850</td>
<td>International Area Study</td>
<td></td>
</tr>
<tr>
<td>The following may be used to fulfill the required 12 s.h. above if the course theme is human geography related:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEOG 4825</td>
<td>Geography Internship</td>
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</tr>
<tr>
<td>GEOG 4840</td>
<td>Seminar in Geography</td>
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</table>

### Total Semester Hours

18

### Minor in Geocraphic Information Science

<table>
<thead>
<tr>
<th>COURSE</th>
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<tbody>
<tr>
<td>GEOG 2611</td>
<td>Geospatial Foundations</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 3701</td>
<td>Introduction to Geographic Information Science</td>
<td>3</td>
</tr>
<tr>
<td>Select 6 s.h. from the following courses:</td>
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<td>6</td>
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<tr>
<td>GEOG 3712</td>
<td>Thematic Map Design and Symbolization</td>
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<tr>
<td>GEOG 3775</td>
<td>Field Methods in Geography</td>
<td></td>
</tr>
<tr>
<td>GEOG 3781</td>
<td>GIS Applications for the Social Sciences</td>
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<tr>
<td>GEOG 3782</td>
<td>GIS Applications for the Natural Sciences</td>
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</tr>
<tr>
<td>GEOG 4802</td>
<td>Advanced Remote Sensing</td>
<td></td>
</tr>
<tr>
<td>GEOG 5812</td>
<td>Global Positioning Systems and GIScience</td>
<td></td>
</tr>
<tr>
<td>GEOG 5814</td>
<td>3D Modeling and GIS</td>
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</table>

### Total Semester Hours

18

### Summary:

GER hours: 40 s.h.
Total GEOG hours: 30 s.h.
Total CSIS/INFO hours: 20-22 s.h.
Total complementary skill hours: 6 s.h.
Outside elective hours: 18 s.h.
Additional hours: 8-10 s.h.
Minor in General Geography

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
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<tbody>
<tr>
<td>GEOG 3701</td>
<td>Introduction to Geographic Information Science</td>
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<td>GEOG 3702</td>
<td>Introduction to Remote Sensing</td>
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<tr>
<td>GEOG 3703</td>
<td>Human Impacts on the Environment</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 3705</td>
<td>Mountain Geography</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 3730</td>
<td>Global Climates</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 3733</td>
<td>Severe and Hazardous Weather</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 3735</td>
<td>Water in the Earth System</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 3737</td>
<td>Soils and Land Use</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 3775</td>
<td>Field Methods in Geography</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 3782</td>
<td>GIS Applications for the Natural Sciences</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 5802</td>
<td>Biogeography</td>
<td>3</td>
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</table>

Select 3 s.h. from the following geospatial techniques courses: 3
GEOG 2611 Geospatial Foundations
GEOG 2626 World Geography
GEOG 2630 Weather
GEOG 3703 Human Impacts on the Environment
GEOG 3705 Mountain Geography
GEOG 3730 Global Climates
GEOG 3733 Severe and Hazardous Weather
GEOG 3735 Water in the Earth System
GEOG 3737 Soils and Land Use
GEOG 5802 Biogeography

Select 3 s.h. from the following physical/environmental geography courses: 3
GEOG 2626 World Geography
GEOG 3712 Thematic Map Design and Symbolization
GEOG 3713 Geography of South America
GEOG 3715 Geography of Middle America
GEOG 3717 Geography of Europe
GEOG 3719 Geography of the United States
GEOG 3721 Geography of Ohio
GEOG 3724 Themes in Cultural Geography
GEOG 3726 Urban Geography
GEOG 3740 The Automobile in American Culture
GEOG 3750 Topics in Regional Geography
GEOG 3751 Urban Geography
GEOG 4825 Geography Internship
GEOG 4840 Seminar in Geography
GEOG 5850 International Area Study

Total Semester Hours 18

Minor in Regional Geography

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<th>COURSE</th>
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<td>GEOG 2626</td>
<td>World Geography</td>
<td>3</td>
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<td>GEOG 2640</td>
<td>Human Geography</td>
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Select 3 s.h. from the following courses: 3
GEOG 2626 World Geography
GEOG 2640 Human Geography

Select 15 s.h. from the following courses: 15
GEOG 3713 Geography of South America
GEOG 3715 Geography of Middle America
GEOG 3717 Geography of Europe
GEOG 3719 Geography of the United States
GEOG 3721 Geography of Ohio
GEOG 3724 Themes in Cultural Geography
GEOG 3750 Topics in Regional Geography

The following may be used to fulfill the required 15 s.h. if the course theme is regionally related:
GEOG 4840 Seminar in Geography
GEOG 5850 International Area Study

6 s.h. of the minor must be in courses numbered 3700 or higher

Total Semester Hours 18

History

Welcome

Hello! I want to tell you how pleased we are to welcome you to Youngstown State University and to the History Program. With a faculty of nine, we offer courses across a broad range of subjects and have something to interest everyone.

I hope that you will drop by and visit us on the fifth floor of DeBartolo Hall, Room 519. Please feel welcome to stop in for advice, general information, or just to chat. You may also want to watch for notices from our Student Clubs – History Club, Phi Alpha Theta, and the Club for Jewish Culture – about scheduled events throughout the semester.

I encourage you to drop by the Youngstown Historical Center of Industry and Labor located at 151 Wood Street on the southern edge of campus. The museum is managed by the History Program, and you and your guests are very welcome to visit us there. (Your student ID grants you free admission at any time.)

Dr. Brian Bonhomme
History Program Coordinator

Mission

The Program of History at Youngstown State University is dedicated to the discovery and dissemination of knowledge about the past, to edify our present, and better plan for the future. The program promotes and integrates scholarship, teaching, and service to educate its undergraduate and graduate students. It promotes civic engagement with the wider community. Through the teaching of history in and out of the classroom the program fosters understanding and appreciation of diversity and provides a global perspective. Our aim is to examine and disseminate knowledge of the past and of the nature of its study and reconstruction through a variety of educational...
experiences and historical methodologies and to train future scholars of history.

The student majoring in history must complete, in addition to the general University requirements, the group requirements outlined on the curriculum sheet (http://catalog.ysu.edu/undergraduate/colleges-programs/college-liberal-arts-social-sciences/department-history/ba-history/#curriculumsheettext). It is recommended that the student select courses with assistance from an advisor, since certain courses are preferable to others according to whether one contemplates graduate study, secondary school teaching, or any of the many other careers for which History provides excellent preparation.

The Bachelor of Arts in History can be completed in eight semesters if students average 16 hours per semester.

For more information, visit the Department of Humanities and Social Sciences, which houses the History Program, in DeBartolo Hall, room 519 or contact us at (330) 941-3452.

Professor

Daniel Ayana, Ph.D., Professor
Brian Bonhomme, Ph.D., Professor
Eleanor A. Congdon, Ph.D., Associate Professor
Amy Fluker, Ph.D., Assistant Professor
Jacob Labendz, Ph.D., Assistant Professor
Thomas E. Leary, Ph.D., Associate Professor
Martha Pallante, Ph.D., Professor
David A. Simonelli, Ph.D., Professor
Fred W. Viehe, Ph.D., Professor

Lecturer

Kyle Starkey, M.A., Lecturer

Majors

• Bachelor in History (p. 217)

Minors

• Minor in History (p. 220)
• Minor in Applied History (p. 220)
• Minor in Judaic Studies (p. 221)

Certificates

• Certificate in Historic Preservation (p. 219)

HIST 1500 Discovering World History 3 s.h.
Introduction to the methods, problems, and content of world history from Antiquity to the present. Emphasizes the relevance of past events and developments to the modern world. Does not count toward the major or minor in history, nor toward integrated social science degrees.

Gen Ed: International Perspectives, Social Science, Social and Personal Awareness.

HIST 1501 American Dreams: Introduction to United States History 3 s.h.
Survey of American history focusing on five strategic events in the American past. Emphasis is on cultural conflict and compromise, institutional developments and revolutions, and the emergence of democracy as concept and practice. This course is intended for those students for whom history is not a requirement.

Gen Ed: Social Science.

HIST 1511 World Civilization to 1500 3 s.h.
Origins and growth of the major civilizations of the world from earliest times to about 1500.
Prereq.: Placement into ENGL 1550 or completion of ENGL 1539 or ENGL 1540.
Gen Ed: Social Science.

HIST 1512 World Civilization from 1500 3 s.h.
Development of the major civilizations of the world from 1500 to the present.
Prereq.: Placement into ENGL 1550 or completion of ENGL 1539 or ENGL 1540.
Gen Ed: International Perspectives, Social Science, Social and Personal Awareness.

HIST 2601 American Military History 3 s.h.
A survey of American military history from the origin of the United States Army to the present, with emphasis on how military policies and strategies have been influenced by the domestic and foreign affairs of the United States.

HIST 2605 Turning Points in United States History 1 3 s.h.
Key episodes in the social, economic, political and cultural developments of the United States to 1877, exploring how diverse peoples shaped the growing nation.
Prereq.: Readiness for ENGL 1550.
Cross-listed: AMER 2605.
Gen Ed: Social Science.

HIST 2606 Turning Points in United States History 2 3 s.h.
Key episodes in the social, economic, political and cultural developments of the United States since 1877, exploring how diverse peoples shaped the growing nation.
Prereq.: Readiness for ENGL 1550.
Cross-listed: AMER 2606.
Gen Ed: Domestic Diversity, Social Science, Social and Personal Awareness.

HIST 3700 The Atlantic World 3 s.h.
Development of the Atlantic rim from 1450 to 1700 with emphasis on the processes of exploration, cultural contact, and colonization. Cross-cultural focus on West Africa, the Caribbean and eastern North America.
Prereq.: HIST 1511 or HIST 2605.

HIST 3702 Early America 3 s.h.
From the first English interactions with the Native Americans and Africans, to the rebellion for Independence, to the struggles over the creation of the Constitution.
Prereq.: HIST 2605.

HIST 3703 Nineteenth Century America 3 s.h.
United States history from the War of 1812 through the Spanish-American War. Emphasis on constitutional developments, the issue of slavery, the Civil War and Industrialization.
Prereq.: HIST 1501 or HIST 2605 or HIST 2606.

HIST 3704 Age of Jefferson and Jackson 3 s.h.
Early 19th century America, with emphasis on politics and culture before 1845.
Prereq.: HIST 2605.

HIST 3706 Age of Lincoln and Grant 3 s.h.
The period from 1845 to 1877, including the development of the North-South conflict, the war years, and the Reconstruction.
Prereq.: HIST 2605.
HIST 3710  Incorporation of America, 1877-1919  3 s.h.
The history of the United States from Reconstruction to the Treaty of Versailles, focusing on the transformation from a rural, agricultural nation to an urban, industrial nation. The nation's political, social, economic and cultural development, along with foreign policy.
Prereq.: HIST 2606.

HIST 3712  United States in Crisis: 1900-1945  3 s.h.
Covers events in the United States from 1900 through the end of World War II. Social, political and cultural history of the Progressive era, World Wars I and II, the Roaring Twenties, the Great Depression and the New Deal.
Prereq.: HIST 1501 or HIST 2606.

HIST 3713  Cold War America: 1945-1990  3 s.h.
An exploration of U.S. efforts to grapple with the Soviet Union, civil rights and equality, the role of government, changing sexual and social mores, the welfare state, and deindustrialization.
Prereq.: HIST 2606.

HIST 3715  Introduction to Historic Preservation  3 s.h.
Introduction to the field of historic preservation. Provides historical context for the discipline as well as a basic grounding in the concepts and opportunities of the field.
Prereq.: HIST 2605 and HIST 2606.

HIST 3717  Constitutional History of the United States  3 s.h.
The development of the American constitutional system from colonial times to the present.
Prereq.: HIST 2605 or HIST 2606.

HIST 3723  History of American Sports  3 s.h.
An examination of sports within America from earliest times to the present. Special emphasis on the manner in which sports and society have influenced each other, such as racial and class relationships, social mobility, politics, religion, and foreign policy.
Prereq.: HIST 2605 or HIST 2606.

HIST 3724  Colonial Latin America  3 s.h.
Latin America from pre-Hispanic times to the independence, wars including both Spanish America and Brazil. Examines colonial institutions and the experiences of indigenous people, people of African descent, and women.
Prereq.: HIST 1512 or HIST 2605.

HIST 3725  Modern Latin America  3 s.h.
History of Latin America from the independence wars to the present. Examines political and economic developments as well as the social history of indigenous people, people of African descent, and women. U.S. influence in the region is also studied.
Prereq.: HIST 1512 or HIST 2606.

HIST 3726  History of Women in the United States  3 s.h.
Analysis of the various roles and contributions of women in American history.
Prereq.: HIST 2605 or HIST 2606.

HIST 3727  Mexico and the Caribbean  3 s.h.
Includes Mexico, Colombia, Venezuela, and the Central American republics. Special consideration is given to 20th century Mexico.
Prereq.: HIST 2605 or HIST 1512, or consent of instructor.

HIST 3730  The Black Experience in American History  3 s.h.
A historical study of Black people's roles in and contribution to the political, social, and economic development of American society.
Prereq.: HIST 2605 or HIST 2606, or AFST 2600.

HIST 3731  History of African American Mayors  3 s.h.
Study of African American mayors, beginning with the 1967 elections of Carl Stokes and Richard Hatcher to the present. Focus is on why African Americans were elected mayors, and what benefits they contributed to the African American community as well as to their respective cities.
Prereq.: HIST 2606 or AFST 2600.

HIST 3734  History of Organized Crime in the United States  3 s.h.
The history or organized crime emphasizes the organization of the criminal underworld, the ethnic, racial, and religious composition of criminal groups, and the impact of organized crime on prostitution, gambling, Prohibition, and drugs.
Prereq.: HIST 2605 or HIST 2606.

HIST 3736  History of American Cities  3 s.h.
City politics, social change, ethnic and racial issues, industrialization, and city planning during the 19th and 20th centuries. Other issues include the provision of city services, the rivalry between cities, and the development of the federal-urban relationship.
Prereq.: HIST 2605 or HIST 2606.

HIST 3740  The Vietnam War  3 s.h.
American involvement in Southeast Asia from the days of French rule to the fall of the Saigon government and beyond. Includes the war debate at home, and other consequences of the war.
Prereq.: HIST 1512, HIST 2606.

HIST 3741  Diplomatic History of the United States 1  3 s.h.
A study of American foreign relations as determined by interaction between domestic and international pressures (1) to 1900 and (2) since 1900.
Prereq.: HIST 2605.

HIST 3742  Diplomatic History of the United States 2  3 s.h.
A study of American foreign relations as determined by interaction between domestic and international pressures (1) to 1900 and (2) since 1900.
Prereq.: HIST 2606.

HIST 3743  Labor in United States History  3 s.h.
Traces the transformation of American workers and the impact of the labor movement upon the United States. Emphasizes the diversity of the working class and the historical context of the of the political and social implications of the labor movement.
Prereq.: HIST 2606.

HIST 3744  The History of American Business  3 s.h.
An examination of the growth and structural development of American business and its relationship to government from colonial times to the present with emphasis on the 20th century.
Prereq.: HIST 2605 or HIST 2606.

HIST 3745  History of Jewish Labor  3 s.h.
Examines Jewish labor history in Europe, the United States, and Israel. Explores the social history of the worker, gender and national differences, living and working conditions, as well as labor movements and worker political mobilization.
Prereq.: HIST 1512 or HIST 2606.

HIST 3747  History of Appalachia  3 s.h.
From 18th century settlement to present, emphasizing images of the region and its people, and focusing on issues of economic development, folk culture, religion, race, gender and outmigration.
Prereq.: HIST 2605 or HIST 2606.

HIST 3748  History of Ohio  3 s.h.
The important events and movements that have shaped Ohio history in the social, economic, religious and political areas.
Prereq.: HIST 2605 or HIST 2606.

HIST 3749  History of African-United States Relations  3 s.h.
Survey of African-U.S. relations from the transatlantic slave trade to the present with emphasis on the 20th century.
Prereq.: HIST 2605 or HIST 1512, or consent of instructor.

HIST 3750  History of Modern Africa  3 s.h.
The impact of colonialism on the peoples of 20th century Africa, focusing on subSahara: Colonialism, colonial administration, urbanization, nationalism, pan-Africanism, decolonization and the challenges of modern Africa.
Prereq.: HIST 1512 or consent of instructor.

HIST 3751  History of South Africa  3 s.h.
From the beginnings of the 19th century to the present.
Prereq.: HIST 1512, HIST 2605, HIST 2606.
HIST 3752  Ancient History 1  3 s.h.
From the Neolithic Revolution to the Peloponnesian Wars. Intensive study of civilizations of Mesopotamia and Egypt, as well as Hellenic history.
Prereq.: HIST 1511.

HIST 3753  Ancient History 2  3 s.h.
The Hellenic Period to the fall of Rome. Intensive study of the Age of Alexander and the Roman Republic.
Prereq.: HIST 1511.

HIST 3755  Early Medieval Civilization  3 s.h.
A political, economic, intellectual and cultural history which traces events and developments throughout Europe from the collapse of the Ancient World to the beginning of the High Middle Ages.
Prereq.: HIST 1511.

HIST 3756  High Medieval Civilization  3 s.h.
A political, economic, intellectual and cultural history which traces events and developments throughout Europe during the High Middle Ages (eleventh through fifteenth centuries).
Prereq.: HIST 1511.

HIST 3757  History of Medicine  3 s.h.
Practices and theories of healing, and their relation to social and intellectual context, from ancient times to the present.
Prereq.: HIST 1511 or HIST 1512, or a social science course.

HIST 3758  Renaissance Europe  3 s.h.
A survey of European history from the end of the High Middle Ages to the 16th century. Emphasizes the rise of humanism and of Renaissance culture in Italy, its dissemination beyond the Alps as well as the development of national states and the flowering of the Late Medieval tradition in western and eastern Europe.
Prereq.: HIST 1511.

HIST 3759  The Reformation Era  3 s.h.
The history of Europe from the Lutheran Revolt to the Peace of Westphalia in 1648. Major themes of study are the causes of the Reformation, the impact of Luther, Calvin and the Radical Reformation, the Catholic Reform movement, the Wars of Religion, and the rise of the modern secular states.
Prereq.: HIST 1512.

HIST 3760  The Age of Louis XIV  3 s.h.
The history of Europe from 1600 to the outbreak of the French Revolution in 1789. Emphasis on France under Louis XIV and Louis XV, Old Regime society, and the intellectual creativity of the Eighteenth-Century Enlightenment. Also focuses on the widening confrontation between science and religion, the growth of Europe’s overseas empire, and the emergence of the modern nation-state.
Prereq.: HIST 1512.

HIST 3761  The French Revolution and Napoleon (1789-1815)  3 s.h.
The French Revolution is examined in detail, especially from its outbreak to the fall of Robespierre. The last portion deals with the rise of Napoleon, his political role, his military campaigns, the reconstruction of Europe, and his fall at Waterloo.
Prereq.: HIST 1512.

HIST 3762  The Second World War  3 s.h.
An examination of the war’s diplomatic and ideological origins; social, economic, and political factors; and strategic, tactical, and technological dimensions of the conflict in all major theaters.
Prereq.: HIST 1512 or HIST 2606.

HIST 3763  Modern France, 1815 to Present  3 s.h.
France from the fall of Napoleon to the present. Major cultural, intellectual, and political themes of the period. Impact of the two World Wars, France’s post-war revival, the student riots of 1968, and the changes which have transformed French politics and society in the 1980s.
Prereq.: HIST 1512.

HIST 3764  Modern Europe, 1715 to the Present  3 s.h.
A survey of European history from the Enlightenment to the European Union. Themes include the development and debate surrounding European civilization’s emphasis on individuality, technology, capitalism, class, war, and progress.
Prereq.: HIST 1512.

HIST 3765  Europe from the Congress of Vienna to the Franco-Prussian War (1815-1871)  3 s.h.
Such movements as Nationalism, the impact of the Industrial Revolution, Marxism, the growth of Democracy, Liberalism and Conservatism, Romanticism and Realism, Reform and Revolution, from the main themes of the period. The course is divided into two historical periods, from 1815 to the Revolution of 1848, and from 1848 to 1871 with the emphasis on the unification of Italy and of Germany and the New Europe that arose as a consequence.
Prereq.: HIST 1512.

HIST 3766  Europe from the Franco-Prussian War to World War I  3 s.h.
The impact of the Paris Commune; revolutionary movements and their contradictions; imperialism, political anti-Semitism; and the images of war; the Bismarckian international order and its suicide.
Prereq.: HIST 1512.

HIST 3767  Europe from World War I to the Present  3 s.h.
War, revolutions, and the European order; Versailles and its contradictions; the Fascist response to Communism and Depression; the interaction of Democracies, Fascism, and Stalinism in the making of World War II and the Cold War.
Prereq.: HIST 1512.

HIST 3769  Modern Germany  3 s.h.
Unification and modernization; scientific, technological, and cultural splendors; world power and disaster; Nazism, the Holocaust, and German society.
Prereq.: HIST 1512.

HIST 3770  Asia to 1500  3 s.h.
Political, economic, religious, artistic, and philosophical developments in India, China and along the Silk Road, from ancient times to 1500 C.E.
Prereq.: HIST 1511 or ASST 1550.

HIST 3772  History of Modern China  3 s.h.
China from the mid-19th century to date, with emphasis on Western impact, industrialization, intellectual trends, the Revolution of 1911, national reconstruction, student movements, the rise of Communism, and the contemporary scene.
Prereq.: HIST 1512 or ASST 1550 or consent of instructor.

HIST 3774  Global Environmental History: Topics and Methods  3 s.h.
The historical development and diversity of ideas and actions regarding the interaction of human societies and the natural environment. From 1492 to the present, with particular emphasis on the twentieth and twentieth centuries. Economic growth and resource depletion. Emergence and development of conservation, environmentalism, ecology. Ideas, events, and institutions. Historiography and methods of environmental history.
Prereq.: HIST 1511, HIST 1512, HIST 2605 or HIST 2606.

HIST 3775  Global Industrial Revolution  3 s.h.
Major themes and events in the origins and global diffusion of industrialization from the 18th to the 21st centuries. The Industrial Revolution and associated changes in technology, society, culture, economy, geopolitics, environment, and public health.
Prereq.: HIST 1512 or HIST 2605 or HIST 2606.

HIST 3776  History of Modern Japan  3 s.h.
Japan’s history from the Meiji Restoration to date, including the industrialization, the party movement, intellectual development, the rise and fall of militarism, postwar reconstruction, and current problems.
Prereq.: HIST 2662 or ASST 1550 or consent of instructor.
HIST 3778  Russia to 1855  3 s.h.
History of Russia from its ninth century origins to the eve of the Great Reforms of Tsar Alexander II. Surveys political, social, cultural, and intellectual developments, the Orthodox Church, and Russian expansion and colonization in Siberia and Alaska.
Prereq.: HIST 1511 or HIST 1512.

HIST 3779  Russia 1855 to Present  3 s.h.
The Russian Empire from the Great Reforms of Alexander II to its collapse during WWI, the Revolutions of 1917, the rise and fall of the Soviet Union (1922-1991), and Soviet successor states to the present.
Prereq.: HIST 1512.

HIST 3780  History of Eastern Europe  3 s.h.
The histories of the nations that have made up Central and Eastern Europe from the earliest times to their present, and their contributions to world civilization.
Prereq.: HIST 1511 or HIST 1512.

HIST 3782  History of the Balkans  3 s.h.
Southeastern Europe from the 4th century to the present, including the impact of the Byzantine and Ottoman Empires and the two World Wars.
Prereq.: HIST 1511 or HIST 1512.

HIST 3783  Britain and Its Empire: 1688 to the Present  3 s.h.
An integrative history of Britain and its empire, from the Glorious Revolution to the Brexit vote in 2016. Focus is on how the acquisition of an empire influenced the development of British liberal politics, industrial and multicultural society, economic morality, and a diverse and world-ranging culture.
Prereq.: HIST 1512.

HIST 3784  Britain and Its Empire 2: 1870-Present  3 s.h.
An integrative history of Britain and its empire, from the opening of the Suez Canal to the present. Emphasis on how Britain's decline as a world political, diplomatic, military and industrial power impacted its world empire during the twentieth century, noting how the empire changed Britain itself in the process.
Prereq.: HIST 1512.

HIST 3785  The Mediterranean World: Modern Italy, 1815-Present  3 s.h.
Survey of Italian history from the Risorgimento to the present. Emphasis on the reasons for the late emergence of Italian nationhood, the rise of Italian nationalism, unification, the weakness of Italian democracy, the rise of Fascism, and the political instability Italians have experienced since 1945.
Prereq.: HIST 1512.

HIST 3787  History of Women in Europe  3 s.h.
Analysis of the various roles and contributions of women in European history from the Renaissance to the present.
Prereq.: HIST 1512.

HIST 3788  The Holocaust  3 s.h.
Study of the attempted genocide against the Jews in World War II. Special emphasis on racial theories that gave rise to Nazism, politics of collaboration, various forms of resistance, and ethical problems associated with the concentration camps.
Prereq.: HIST 1512 or JUDC 1500.

HIST 3789  Jewish History  3 s.h.
Jewish history from antiquity until WWII, with an emphasis on the development of Jewish cultures and societies, as well as the changing place of Jews in the wider world.
Prereq.: HIST 1511 and 1512, or JUDC 1500.

HIST 3790  Medieval Britain  3 s.h.
From the Celtic times to 1485. Emphasizes the political and cultural evolution of the British people before and after the Norman Conquest, including the creation of the English identity, the development of constitutional monarchy, the propaganda value of architecture, art, and literature, and the role of the Church.
Prereq.: HIST 1511.

HIST 3792  History of Ireland  3 s.h.
Irish history from St. Patrick to the Good Friday Agreement. Emphasis is on Ireland’s relationship with Britain, Europe and the United States, and its troubled status as colony, occupied nation and part of the United Kingdom.
Prereq.: HIST 1512.

HIST 3793  Tudor-Stuart Britain  3 s.h.
England, Scotland, Wales, and Ireland from the end of the War of the Roses to the ascension of George I to the British throne in 1714. Emphasis on the development of the centralized Tudor state, colonization of the New World and India, the English Civil War and Glorious Revolution, European wars for naval supremacy, and the culture of the Shakespearean age.
Prereq.: HIST 1512.

HIST 3794  The First World War  3 s.h.
An examination of the origins of the war, the social, economic, intellectual and political repercussions, and the technical and military developments.
Prereq.: HIST 1512.

HIST 3795  The World since 1945  3 s.h.
Global developments including the Cold War, decolonization and economic dependency in the non-western world; militarism and terrorism; pollution; and the internationalism of the world.
Prereq.: HIST 1512.

HIST 3796  Genocide and Mass Murder  3 s.h.
The origins, definitions, causes and forms of genocide. Case studies will be drawn from across geographical regions and time periods such as Armenia, the Holocaust, Cambodia, the former Yugoslavia, Rwanda and the Sudan.
Prereq.: HIST 1512 or consent of instructor.

HIST 3797  Middle East 1: The Islamic Centuries  3 s.h.
From Muhammad to the collapse of the Ottoman Empire. Intensive study of the medieval Islamic caliphates, Crusades, Turks, and European imperialism.
Prereq.: HIST 1511 or 2661.

HIST 3798  Middle East 2: The Modern Period  3 s.h.
Prereq.: HIST 1512 or 2661.

HIST 4801  Select Problems in American History  3 s.h.
Specific problems in American history in such areas as economics, political theory, and cultural and intellectual history. May be repeated with different content.
Prereq.: Consent of instructor.

HIST 4808  Oral Communication Projects in History  1 s.h.
Development of oral communication skills for students of history. Emphasizes the understanding of effective speaking practices, the development of self-analysis, and the presentation of material gathered from a linked course.
Concurrent: Enrollment in an upper division history course.

HIST 4809  Documentation and Interpretation of Historic Sites  3 s.h.
Methods of documenting historic properties especially as related to the National Register of Historic Places. Includes interpretation of historic sites for public exhibit.
Prereq.: HIST 3715.

HIST 4811  Practicum in Historic Preservation  3 s.h.
Experience in historic preservation through student participation in a wide variety of historic preservation projects. Prepares students for internships outside the university.
Prereq.: HIST 3715 and permission of Historic Preservation Committee.

HIST 4812  Historic Preservation Internship  3 s.h.
Practical application of principles and methods in the field of historic preservation with the goal of producing a completed project. Internship to be selected by student in conjunction with program director. May be repeated once.
Prereq.: HIST 3715 and approval of internship committee.
HIST 4815  American Material Culture  3 s.h.
A discussion and analysis of the use and importance of material artifacts as texts for the recovery of the American past. Emphasis on sources not traditionally utilized by historians. Examples include the contextual analysis of children’s books, foodways, and sacred spaces.
Prereq.: HIST 2605 and HIST 2606, or AMER 2601 and AMER 3701.
Cross-listed: AMER 4815.

HIST 4850  International Area Study  3-9 s.h.
A course in the geography and history of a selected international area with emphasis on cultural development by traveling in the selected region. The class and travel is supervised by the Geography and/or History faculty. The course grade is based upon a term paper which must be submitted within 60 days after the end of the course.
Prereq.: By permit only.

HIST 4851  Select Problems in European History  3 s.h.
Specific problems in European history in such areas as economics, political theory, and cultural and intellectual history. May be repeated with different content.
Prereq.: Consent of instructor.

HIST 4851B  Select Problems European History Post-War Germany  3 s.h.
Specific problems in European history in such areas as economics, political theory, and cultural and intellectual history. May be repeated with different content.
Prereq.: Consent of instructor.

HIST 4860  Select Problems in Transnational History  3 s.h.
Transnational issues in African, Asian, Latin American, and/or Middle Eastern history in such areas as economic, political, social, cultural and intellectual history. May be repeated with different content.
Prereq.: Consent of instructor.

HIST 4860A  Select Problems in Transnational History Intro to Jewish Studies  3 s.h.
Transnational issues in African, Asian, Latin American, and/or Middle Eastern history in such areas as economic, political, social, cultural and intellectual history. May be repeated with different content.
Prereq.: Consent of instructor.

HIST 4870  Senior Research Seminar  3 s.h.
A seminar that requires the writing of an extensive paper based mainly on primary material. All history majors must take this course.
Prereq.: Senior standing and completion of four upper-division history courses with a grade of "C" or better.
Gen Ed: Capstone.

HIST 5806  American Architectural History 1  3 s.h.
Development of structural styles and trends within the United States, focusing on formal architectural styles.
Prereq.: HIST 2605 and HIST 2606.

HIST 5807  American Architectural History 2  3 s.h.
Development of vernacular, folk, and industrial architecture in the United States. Focus is on local variants with emphasis on 20th Century specimens. Field trips will view representative building types, especially housing.
Prereq.: HIST 5806.

HIST 5810  Conservation of the Historic Built Environment  3 s.h.
The theory and practice of preserving and rehabilitating all aspects of the historic built environment. Provides broad exposure through field experience.
Prereq.: HIST 3715.

Judaic Studies

JUDC 1500  Introduction to Jewish Studies  3 s.h.
A broad overview of Jewish history, culture, literature, and religion. Covers Jewish Civilization from its emergence in the Ancient Near East to its diverse worldwide expressions in the present day.

JUDC 3751  Lessons of the Holocaust and the U.S. Holocaust Memorial Museum  3 s.h.
S. Holocaust Memorial Museum. The history of the Holocaust and how people have drawn lessons from that atrocity, with a special focus on the U.S. Holocaust Memorial Museum (USHMM). Requires a supervised visit to the USHMM in Washington, D.C., in addition to coursework.
Prereq.: By permit; or JUDC 1500.

Bachelor of Arts in History

In addition to completing the requirements listed on the curriculum sheet (http://catalog.ysu.edu/undergraduate/colleges-programs/college-liberal-arts-social-sciences/department-history/ba-history/#curriculumsheettext), a history major must provide an essay examination, a book review, a research paper, and one additional paper for a portfolio (all produced in history classes) that will be maintained in the Department of Humanities and Social Sciences. The essay examination should be from an upper-division course. The book review should include:

- a title page
- bibliographic entry at the beginning
- content analysis and evaluation with a minimum of 1,000 words, typed in a 10-12 font, double-spaced, and one-inch margins

The research paper will be based on primary or secondary sources with a minimum of 3,500 words, typed in a 10-12 font, double-spaced with end notes or footnotes, bibliographic entries based on Chicago Manual of Style, a title page, and one-inch margins. A second paper from an upper-division class is also to be included of at least 1,500 words.

Students transferring 20 or more semester hours in history to Youngstown State University from another institution must meet the group requirements to obtain a major in History for graduation. At least five of the courses in Groups B, C, and D (see curriculum sheet (http://catalog.ysu.edu/undergraduate/colleges-programs/college-liberal-arts-social-sciences/department-history/ba-history/#curriculumsheettext)) must be taken at Youngstown State University.

It is recommended that the student in choosing electives should acquire as broad a background as possible in the social sciences and the humanities. Particular attention is called to courses offered in English, Economics, Political Science, Philosophy, Art, Music, Geography, and Sociology, and to the humanities courses. Students contemplating graduate work in history should consider taking more foreign language courses than the minimum necessary to meet the general degree requirement. Finally, the student is reminded that the Department of Humanities and Social Sciences takes seriously the University's emphasis on the importance of adequate competence in the English language (See Proficiency in English, in the Academic Policies and Procedures section of the Undergraduate Catalog); when there is need, students majoring in history should include in their programs advanced composition courses and courses in speech.

COURSE  TITLE  S.H.
FIRST YEAR REQUIREMENT - STUDENT SUCCESS
YSU 1500 Success Seminar 1-2
or SS 1500 Strong Start Success Seminar
or HONR 1500 Intro to Honors

General Education Requirements
ENGL 1550 Writing 1 3-4
or ENGL 1549 Writing 1 with Support
ENGL 1551 Writing 2 3
CMST 1545 Communication Foundations 3
Mathematics Requirement 3
Arts and Humanities (6 s.h.) 6
Natural Sciences (2 courses, 1 with lab) (6-7 s.h.) 7
Social Science (6 s.h.) 6
Social and Personal Awareness (6 s.h.) 6

**Foreign Language Requirement**
- FNLG 1550 Elementary Foreign Language 4
- FNLG 2600 Intermediate Foreign Language 4

**Major Requirements**

**Group A - Survey Courses**
Select eight courses from the following with no more than three from each group:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 1511</td>
<td>World Civilization to 1500</td>
</tr>
<tr>
<td>HIST 1512</td>
<td>World Civilization from 1500</td>
</tr>
<tr>
<td>HIST 2605</td>
<td>Turning Points in United States History 1</td>
</tr>
<tr>
<td>HIST 2606</td>
<td>Turning Points in United States History 2</td>
</tr>
</tbody>
</table>

**Section 2:**
- HIST 1511H Honors World Civilization to 1500
- HIST 1512H Honors World Civilization from 1500
- HIST 2605H Honors Turning Points in United States History 1
- HIST 2606H Honors Turning Points in United States History 2

Select eight courses from the following with no more than three from each group:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 2601</td>
<td>American Military History</td>
</tr>
<tr>
<td>HIST 3700</td>
<td>The Atlantic World</td>
</tr>
<tr>
<td>HIST 3702</td>
<td>Early America</td>
</tr>
<tr>
<td>HIST 3703</td>
<td>Nineteenth Century America</td>
</tr>
<tr>
<td>HIST 3704</td>
<td>Age of Jefferson and Jackson</td>
</tr>
<tr>
<td>HIST 3706</td>
<td>Age of Lincoln and Grant</td>
</tr>
<tr>
<td>HIST 3710</td>
<td>Incorporation of America, 1877-1919</td>
</tr>
<tr>
<td>HIST 3712</td>
<td>United States in Crisis: 1900-1945</td>
</tr>
<tr>
<td>HIST 3713</td>
<td>Cold War America: 1945-1990</td>
</tr>
<tr>
<td>HIST 3715</td>
<td>Introduction to Historic Preservation</td>
</tr>
<tr>
<td>HIST 3717</td>
<td>Constitutional History of the United States</td>
</tr>
<tr>
<td>HIST 3723</td>
<td>History of American Sports</td>
</tr>
<tr>
<td>HIST 3726</td>
<td>History of Women in the United States</td>
</tr>
<tr>
<td>HIST 3730</td>
<td>The Black Experience in American History</td>
</tr>
<tr>
<td>HIST 3731</td>
<td>History of African American Mayors</td>
</tr>
<tr>
<td>HIST 3734</td>
<td>History of Organized Crime in the United States</td>
</tr>
<tr>
<td>HIST 3736</td>
<td>History of American Cities</td>
</tr>
<tr>
<td>HIST 3740</td>
<td>The Vietnam War</td>
</tr>
<tr>
<td>HIST 3741</td>
<td>Diplomatic History of the United States 1</td>
</tr>
<tr>
<td>HIST 3742</td>
<td>Diplomatic History of the United States 2</td>
</tr>
<tr>
<td>HIST 3743</td>
<td>Labor in United States History</td>
</tr>
<tr>
<td>HIST 3744</td>
<td>The History of American Business</td>
</tr>
<tr>
<td>HIST 3747</td>
<td>History of Appalachia</td>
</tr>
<tr>
<td>HIST 3748</td>
<td>History of Ohio</td>
</tr>
<tr>
<td>HIST 3762</td>
<td>The Second World War</td>
</tr>
<tr>
<td>HIST 4801</td>
<td>Select Problems in American History</td>
</tr>
<tr>
<td>HIST 4811</td>
<td>Practicum in Historic Preservation</td>
</tr>
<tr>
<td>HIST 4812</td>
<td>Historic Preservation Internship</td>
</tr>
<tr>
<td>HIST 4815</td>
<td>American Material Culture</td>
</tr>
<tr>
<td>HIST 5806</td>
<td>American Architectural History 1</td>
</tr>
<tr>
<td>HIST 5807</td>
<td>American Architectural History 2</td>
</tr>
<tr>
<td>HIST 5810</td>
<td>Conservation of the Historic Built Environment</td>
</tr>
</tbody>
</table>

**Group B - American History**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 3745</td>
<td>History of Jewish Labor</td>
</tr>
<tr>
<td>HIST 3752</td>
<td>Ancient History 1</td>
</tr>
<tr>
<td>HIST 3753</td>
<td>Ancient History 2</td>
</tr>
<tr>
<td>HIST 3755</td>
<td>Early Medieval Civilization</td>
</tr>
</tbody>
</table>

**Group C - European History**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 3761</td>
<td>The French Revolution and Napoleon (1789-1815)</td>
</tr>
<tr>
<td>HIST 3762</td>
<td>The Second World War</td>
</tr>
<tr>
<td>HIST 3763</td>
<td>Modern France, 1815 to Present</td>
</tr>
<tr>
<td>HIST 3764</td>
<td>Modern Europe, 1715 to the Present</td>
</tr>
<tr>
<td>HIST 3765</td>
<td>Europe from the Congress of Vienna to the Franco-Prussian War (1815-1871)</td>
</tr>
<tr>
<td>HIST 3766</td>
<td>Europe from the Franco-Prussian War to World War I</td>
</tr>
<tr>
<td>HIST 3767</td>
<td>Europe from World War I to the Present</td>
</tr>
<tr>
<td>HIST 3769</td>
<td>Modern Germany</td>
</tr>
<tr>
<td>HIST 3774</td>
<td>Global Environmental History: Topics and Methods</td>
</tr>
<tr>
<td>HIST 3778</td>
<td>Russia to 1855</td>
</tr>
<tr>
<td>HIST 3779</td>
<td>Russia 1855 to Present</td>
</tr>
<tr>
<td>HIST 3780</td>
<td>History of Eastern Europe</td>
</tr>
<tr>
<td>HIST 3782</td>
<td>History of the Balkans</td>
</tr>
<tr>
<td>HIST 3783</td>
<td>Britain and Its Empire 1: 1688 to the Present</td>
</tr>
<tr>
<td>HIST 3784</td>
<td>Britain and Its Empire 2: 1870-Present</td>
</tr>
<tr>
<td>HIST 3785</td>
<td>The Mediterranean World: Modern Italy, 1815-Present</td>
</tr>
<tr>
<td>HIST 3787</td>
<td>History of Women in Europe</td>
</tr>
<tr>
<td>HIST 3788</td>
<td>The Holocaust</td>
</tr>
<tr>
<td>HIST 3790</td>
<td>Medieval Britain</td>
</tr>
<tr>
<td>HIST 3794</td>
<td>The First World War</td>
</tr>
<tr>
<td>HIST 4850</td>
<td>International Area Study</td>
</tr>
<tr>
<td>HIST 4851</td>
<td>Select Problems in European History</td>
</tr>
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</table>

**Group D - Transnational History**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>HIST 3795</td>
<td>The World since 1945</td>
</tr>
<tr>
<td>HIST 3796</td>
<td>Genocide and Mass Murder</td>
</tr>
<tr>
<td>HIST 3797</td>
<td>Middle East 1: The Islamic Centuries</td>
</tr>
<tr>
<td>HIST 3798</td>
<td>Middle East 2: The Modern Period</td>
</tr>
<tr>
<td>HIST 4850</td>
<td>International Area Study</td>
</tr>
<tr>
<td>HIST 4860</td>
<td>Select Problems in Transnational History</td>
</tr>
</tbody>
</table>

**Capstone**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 4870</td>
<td>Senior Research Seminar</td>
</tr>
</tbody>
</table>

Total Semester Hours = 39 s.h.

1 No course can count in more than one group. All courses must be passed with a grade of C or better. Courses may count in only one category. Six courses in Groups B, C, and D must be at 3700 level or higher.
# Certificate in Historic Preservation

Historic preservation specialists encourage the renovation and re-use of America's built environment: buildings and bridges, farms and factories, battlefields and business districts, and even entire neighborhoods. Professionals in this fast-growing field find employment with consulting firms or with local, state, or national preservation groups, museums, or government agencies.

Youngstown State University offers a Certificate in Historic Preservation for students at either the undergraduate or graduate level. Classes give students training in historic research skills plus direct experience in real-world preservation tasks.

## Preservation Core Courses

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 2605</td>
<td>Turning Points in United States History 1</td>
<td>3</td>
</tr>
<tr>
<td>HIST 2606</td>
<td>Turning Points in United States History 2</td>
<td>3</td>
</tr>
<tr>
<td>HIST 3715</td>
<td>Introduction to Historic Preservation</td>
<td>3</td>
</tr>
<tr>
<td>HIST 5806</td>
<td>American Architectural History 1</td>
<td>3</td>
</tr>
<tr>
<td>HIST 5807</td>
<td>American Architectural History 2</td>
<td>3</td>
</tr>
<tr>
<td>HIST 5810</td>
<td>Conservation of the Historic Built Environment</td>
<td>3</td>
</tr>
<tr>
<td>HIST 4811</td>
<td>Practicum in Historic Preservation (group project in the community)</td>
<td>3</td>
</tr>
<tr>
<td>HIST 4812</td>
<td>Historic Preservation Internship</td>
<td>3</td>
</tr>
</tbody>
</table>

## Electives

Select two of the following:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 3736</td>
<td>History of American Cities</td>
</tr>
<tr>
<td>HIST 3748</td>
<td>History of Ohio</td>
</tr>
<tr>
<td>HIST 4815</td>
<td>American Material Culture</td>
</tr>
<tr>
<td>GEOG 3726</td>
<td>Urban Geography</td>
</tr>
<tr>
<td>ANTH 4890</td>
<td>Advanced Topics in Archaeology</td>
</tr>
<tr>
<td>ANTH 4825</td>
<td>New World Archaeology: Topics</td>
</tr>
<tr>
<td>MRCH 4870</td>
<td>Global Fashion Economy</td>
</tr>
</tbody>
</table>

**Total Semester Hours:** 30

Other courses may be substituted with permission of the department.

In addition, hands-on instruction in preservation technology is available.
Learning Outcomes

1. Students will demonstrate the skills necessary for the historian to analyze information and report findings effectively, by recognizing the difference between primary and secondary resources and being able to critically read and analyze their content; by effectively communicating in written and oral media; and by exhibiting satisfactory critical-thinking and synthesis skills.

2. Students will demonstrate comprehension of the basic concepts that guide the historian's work, by understanding: the concepts of historiography and that historical interpretation is not fixed but changes over time; the significance of chronologies and the impact of cause and effect; and the importance and impact of cultural diversity on the past and its relevance in the present.

3. Students will demonstrate the ability to translate traditional historical scholarship into media meant primarily for non-academic audiences.

Minor in Applied History

<table>
<thead>
<tr>
<th>COURSE</th>
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<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 2605</td>
<td>Turning Points in United States History 1</td>
<td>3</td>
</tr>
<tr>
<td>HIST 2606</td>
<td>Turning Points in United States History 2</td>
<td>3</td>
</tr>
<tr>
<td>HIST 5806</td>
<td>American Architectural History 1</td>
<td>3</td>
</tr>
<tr>
<td>HIST 5807</td>
<td>American Architectural History 2</td>
<td>3</td>
</tr>
<tr>
<td>HIST 4812</td>
<td>Historic Preservation Internship</td>
<td>3</td>
</tr>
<tr>
<td>HIST 5810</td>
<td>Conservation of the Historic Built Environment</td>
<td>3</td>
</tr>
<tr>
<td>HIST 3715</td>
<td>Introduction to Historic Preservation</td>
<td>3</td>
</tr>
<tr>
<td>HIST 4811</td>
<td>Practicum in Historic Preservation</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Semester Hours 24

Minor in History

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 1511</td>
<td>World Civilization to 1500</td>
<td>3</td>
</tr>
<tr>
<td>or HIST 1512</td>
<td>World Civilization from 1500</td>
<td></td>
</tr>
<tr>
<td>HIST 2605</td>
<td>Turning Points in United States History 1</td>
<td>3</td>
</tr>
<tr>
<td>or HIST 2606</td>
<td>Turning Points in United States History 2</td>
<td>3</td>
</tr>
</tbody>
</table>

Select four courses chosen from Groups B, C, & D below. One course must be selected from each group. The fourth course may be from Group B, C, or D. Courses must be at the 3700-level or higher. All courses must be passed with a grade of C or better.

**Group B (American)**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 2601</td>
<td>American Military History</td>
<td>3</td>
</tr>
<tr>
<td>HIST 3700</td>
<td>The Atlantic World ¹</td>
<td>3</td>
</tr>
<tr>
<td>HIST 3701</td>
<td>The Atlantic World ¹</td>
<td>3</td>
</tr>
<tr>
<td>HIST 3702</td>
<td>Early America</td>
<td>3</td>
</tr>
<tr>
<td>HIST 3704</td>
<td>Age of Jefferson and Jackson</td>
<td>3</td>
</tr>
<tr>
<td>HIST 3706</td>
<td>Age of Lincoln and Grant</td>
<td>3</td>
</tr>
<tr>
<td>HIST 3710</td>
<td>Incorporation of America, 1877-1919</td>
<td>3</td>
</tr>
<tr>
<td>HIST 3712</td>
<td>United States in Crisis: 1900-1945</td>
<td>3</td>
</tr>
<tr>
<td>HIST 3713</td>
<td>Cold War America: 1945-1990</td>
<td>3</td>
</tr>
<tr>
<td>HIST 3715</td>
<td>Introduction to Historic Preservation</td>
<td>3</td>
</tr>
<tr>
<td>HIST 3717</td>
<td>Constitutional History of the United States</td>
<td>3</td>
</tr>
<tr>
<td>HIST 3723</td>
<td>History of American Sports</td>
<td>3</td>
</tr>
<tr>
<td>HIST 3726</td>
<td>History of Women in the United States</td>
<td>3</td>
</tr>
<tr>
<td>HIST 3734</td>
<td>History of Organized Crime in the United States</td>
<td>3</td>
</tr>
<tr>
<td>HIST 3736</td>
<td>History of American Cities</td>
<td>3</td>
</tr>
<tr>
<td>HIST 3740</td>
<td>The Vietnam War ¹</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
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<tbody>
<tr>
<td>HIST 3741</td>
<td>Diplomatic History of the United States 1</td>
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</tr>
<tr>
<td>HIST 3742</td>
<td>Diplomatic History of the United States 2</td>
<td>3</td>
</tr>
<tr>
<td>HIST 3743</td>
<td>Labor in United States History</td>
<td>3</td>
</tr>
<tr>
<td>HIST 3744</td>
<td>The History of American Business</td>
<td>3</td>
</tr>
<tr>
<td>HIST 3747</td>
<td>History of Appalachia</td>
<td>3</td>
</tr>
<tr>
<td>HIST 3748</td>
<td>History of Ohio</td>
<td>3</td>
</tr>
<tr>
<td>HIST 3762</td>
<td>The Second World War ¹</td>
<td>3</td>
</tr>
<tr>
<td>HIST 4801</td>
<td>Select Problems in American History</td>
<td>3</td>
</tr>
<tr>
<td>HIST 4811</td>
<td>Practicum in Historic Preservation</td>
<td>3</td>
</tr>
<tr>
<td>HIST 5806</td>
<td>American Architectural History 1</td>
<td>3</td>
</tr>
<tr>
<td>HIST 5807</td>
<td>American Architectural History 2</td>
<td>3</td>
</tr>
<tr>
<td>HIST 4812</td>
<td>Historic Preservation Internship</td>
<td>3</td>
</tr>
<tr>
<td>HIST 4815</td>
<td>American Material Culture</td>
<td>3</td>
</tr>
<tr>
<td>HIST 5810</td>
<td>Conservation of the Historic Built Environment</td>
<td>3</td>
</tr>
</tbody>
</table>

**Group C (European)**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 3752</td>
<td>Ancient History 1</td>
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</tr>
<tr>
<td>HIST 3753</td>
<td>Ancient History 2</td>
<td>3</td>
</tr>
<tr>
<td>HIST 3755</td>
<td>Early Medieval Civilization</td>
<td>3</td>
</tr>
<tr>
<td>HIST 3756</td>
<td>History of Medicine</td>
<td>3</td>
</tr>
<tr>
<td>HIST 3757</td>
<td>The Reformation Era</td>
<td>3</td>
</tr>
<tr>
<td>HIST 3758</td>
<td>Renaissance Europe</td>
<td>3</td>
</tr>
<tr>
<td>HIST 3759</td>
<td>The Age of Louis XIV</td>
<td>3</td>
</tr>
<tr>
<td>HIST 3761</td>
<td>The French Revolution and Napoleon (1789-1815)</td>
<td>3</td>
</tr>
<tr>
<td>HIST 3762</td>
<td>The Second World War ¹</td>
<td>3</td>
</tr>
<tr>
<td>HIST 3763</td>
<td>Modern France, 1815 to Present</td>
<td>3</td>
</tr>
<tr>
<td>HIST 3764</td>
<td>Modern Europe, 1715 to the Present</td>
<td>3</td>
</tr>
<tr>
<td>HIST 3765</td>
<td>Europe from the Congress of Vienna to the Franco-Prussian War (1815-1871)</td>
<td>3</td>
</tr>
<tr>
<td>HIST 3766</td>
<td>Europe from the Franco-Prussian War to World War I</td>
<td>3</td>
</tr>
<tr>
<td>HIST 3767</td>
<td>Europe from World War I to the Present</td>
<td>3</td>
</tr>
<tr>
<td>HIST 3769</td>
<td>Modern Germany</td>
<td>3</td>
</tr>
<tr>
<td>HIST 3774</td>
<td>Global Environmental History: Topics and Methods ¹</td>
<td>3</td>
</tr>
<tr>
<td>HIST 3775</td>
<td>Global Industrial Revolution</td>
<td>3</td>
</tr>
<tr>
<td>HIST 3776</td>
<td>Russia to 1855</td>
<td>3</td>
</tr>
<tr>
<td>HIST 3777</td>
<td>Russia 1855 to Present</td>
<td>3</td>
</tr>
<tr>
<td>HIST 3780</td>
<td>History of Eastern Europe</td>
<td>3</td>
</tr>
<tr>
<td>HIST 3782</td>
<td>History of the Balkans</td>
<td>3</td>
</tr>
<tr>
<td>HIST 3784</td>
<td>Britain and Its Empire 2: 1870-Present</td>
<td>3</td>
</tr>
<tr>
<td>HIST 3785</td>
<td>The Mediterranean World: Modern Italy, 1815-Present</td>
<td>3</td>
</tr>
<tr>
<td>HIST 3787</td>
<td>History of Women in Europe</td>
<td>3</td>
</tr>
<tr>
<td>HIST 3788</td>
<td>The Holocaust</td>
<td>3</td>
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<tr>
<td>HIST 3790</td>
<td>Medieval Britain</td>
<td>3</td>
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<tr>
<td>HIST 3794</td>
<td>The First World War</td>
<td>3</td>
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<tr>
<td>HIST 4850</td>
<td>International Area Study</td>
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<tr>
<td>HIST 4851</td>
<td>Select Problems in European History</td>
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</table>

**Group D (Non-Western)**

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<tr>
<th>COURSE</th>
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<tbody>
<tr>
<td>HIST 3700</td>
<td>The Atlantic World ¹</td>
<td>3</td>
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<tr>
<td>HIST 3724</td>
<td>Colonial Latin America</td>
<td>3</td>
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<tr>
<td>HIST 3725</td>
<td>Modern Latin America</td>
<td>3</td>
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<tr>
<td>HIST 3727</td>
<td>Mexico and the Caribbean</td>
<td>3</td>
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<tr>
<td>HIST 3740</td>
<td>The Vietnam War ¹</td>
<td>3</td>
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<tr>
<td>HIST 3749</td>
<td>History of African-United States Relations</td>
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<tr>
<td>HIST 3750</td>
<td>History of Modern Africa</td>
<td>3</td>
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<tr>
<td>HIST 3751</td>
<td>History of South Africa</td>
<td>3</td>
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<td>HIST 3770</td>
<td>Asia to 1500</td>
<td>3</td>
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<td>HIST 3772</td>
<td>History of Modern China</td>
<td>3</td>
</tr>
<tr>
<td>HIST 3774</td>
<td>Global Environmental History: Topics and Methods ¹</td>
<td>3</td>
</tr>
</tbody>
</table>
Our programs make an excellent addition to complement any career. The Youngstown State University!

about the offerings of the Philosophy and Religious Studies programs at YSU. In addition to our wonderful course offerings, we have a vibrant student participation and student leadership. Study Abroad trips to various locations around the world may be taken for credit, based upon availability. Hebrew language may also be taken for minor credit.

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<tr>
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<tr>
<td>HIST 1512</td>
<td>World Civilization from 1500</td>
<td>3</td>
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<tr>
<td>REL 2601</td>
<td>Introduction to World Religions</td>
<td>3</td>
</tr>
<tr>
<td>HIST 3789</td>
<td>Jewish History</td>
<td>3</td>
</tr>
<tr>
<td>JUDC 3751</td>
<td>Lessons of the Holocaust and the U.S. Holocaust Memorial Museum</td>
<td>3</td>
</tr>
</tbody>
</table>

Select two of the following:  
HIST 3798 Middle East 2: The Modern Period  
HIST 3788 The Holocaust  
REL 3731 Hebrew Scriptures  
HBRW 2605 Advanced Intermediate Hebrew

Total Semester Hours 18

No course can count in more than one group. Courses may count in only one category.

Minor in Judaic Studies

Jewish history stretches back over three-thousand years and spans the globe. Students who minor in Jewish studies will explore Jewish societies and cultures in their profound variety. Not only will students learn the fundamentals of the Jewish religion and Jewish thought, but they will also use these to reflect upon the broader world in which Jews have lived. The study of Jewish experience through history can be a key to deeper insights into world history. Our program offers a focus on the history and meaning of the Holocaust, the study of which helps students to think critically about the modern world and their responsibilities to it. The Center for Judaic and Holocaust Studies organizes a robust selection of extra-curricular activities, often in partnership with the student-led Club for Jewish Culture. These supplement classroom instruction and offer opportunities for active participation and student leadership. Study Abroad trips to various locations around the world may be taken for credit, based upon availability. Hebrew language may also be taken for minor credit.

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<tr>
<td>HIST 3775</td>
<td>Global Industrial Revolution 1</td>
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<tr>
<td>HIST 3776</td>
<td>History of Modern Japan</td>
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<td>HIST 3779</td>
<td>Russia 1855 to Present 1</td>
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<tr>
<td>HIST 3789</td>
<td>Jewish History</td>
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<td>HIST 3795</td>
<td>The World since 1945</td>
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<tr>
<td>HIST 3797</td>
<td>Middle East 1: The Islamic Centuries</td>
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<tr>
<td>HIST 3798</td>
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<tr>
<td>HIST 4850</td>
<td>International Area Study 1</td>
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<tr>
<td>HIST 4860</td>
<td>Select Problems in Transnational History</td>
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Total Semester Hours 18

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Philosophy and Religious Studies

Welcome to Philosophy and Religious Studies

Welcome to Youngstown State University and the programs of Philosophy and Religious Studies! Our programs have a lot to offer on matters of central importance to the lives of our students, our community, and the mission of YSU. In addition to our wonderful course offerings, we have a vibrant student organization, organize a speakers series with world-class scholars, and are home to both the James Dale Ethics Center and the Center for Islamic Studies. I encourage you to explore our website (http://philrel.ysu.edu/) to learn more about the offerings of the Philosophy and Religious Studies programs at Youngstown State University!

The YSU Programs of Philosophy and Religious Studies offer a wealth of productive studies for life and technical knowledge for career opportunities. Our programs make an excellent addition to complement any career. The majors in Philosophy or Religious Studies are also sound preparations for a wide range of graduate programs. The department offers degrees in Philosophy, Religious Studies, and Pre-Counseling (with either a Philosophy or a Religious Studies focus), as well as a number of minors.

-Alan Tomhave, Chair, Department of Humanities and Social Sciences

Minor in Judaic Studies

Jewish history stretches back over three-thousand years and spans the globe. Students who minor in Jewish studies will explore Jewish societies and cultures in their profound variety. Not only will students learn the fundamentals of the Jewish religion and Jewish thought, but they will also use these to reflect upon the broader world in which Jews have lived. The study of Jewish experience through history can be a key to deeper insights into world history. Our program offers a focus on the history and meaning of the Holocaust, the study of which helps students to think critically about the modern world and their responsibilities to it. The Center for Judaic and Holocaust Studies organizes a robust selection of extra-curricular activities, often in partnership with the student-led Club for Jewish Culture. These supplement classroom instruction and offer opportunities for active participation and student leadership. Study Abroad trips to various locations around the world may be taken for credit, based upon availability. Hebrew language may also be taken for minor credit.

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Select two of the following:  
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HIST 3788 The Holocaust  
REL 3731 Hebrew Scriptures  
HBRW 2605 Advanced Intermediate Hebrew

Total Semester Hours 18

No course can count in more than one group. Courses may count in only one category.

Specialized Centers

The Department of Philosophy and Religious Studies houses The Dr. James Dale Ethics Center and the Center for Islamic Studies.

The Dr. James Dale Ethics Center

The Dr. James Dale Ethics Center was founded in 1993 to support the study and teaching of ethics and to promote moral reflection and conduct in personal and professional life. Its activities are guided by the conviction that institutions of higher education play a crucially important role in creating and sustaining a democratic people, concerned not only with private but also common purposes. To accomplish its mission, the Center:

• Sponsors ethics seminars, workshops, and conferences for regional professionals;
• Offers lectures to the University and general community;
• Provides ethics consultation for regional organizations;
• Promotes the scholarship of teaching and learning of ethics

The Director of the Ethics Center is Dr. Mark Vopat, Professor of Philosophy in the Department of Philosophy and Religious Studies.

The Center for Islamic Studies

The Center for Islamic Studies is devoted to the scholarly study of Islam and to educating the community about Islamic religion, history, and culture. It was created through an agreement between the Youngstown Muslim community and Youngstown State University. To accomplish its mission, the Center:

• Offers lectures to the University and general community;
• Co-publishes (with the Iqbal Academy Pakistan) the Iqbal Quarterly, which aims to introduce the works of the South Asian poet-thinker Muhammad Iqbal to general readers in the English-speaking world;
• Participates in The Pluralism Project of the Department of Philosophy and Religious Studies, which publishes E Pluribus, a newsletter devoted to interfaith activities in the Mahoning Valley and to events of general interest in the field of religious pluralism.

The Director of the Center for Islamic Studies is Dr. Mustansir Mir, University Professor of Islamic Studies in the Department of Philosophy and Religious Studies.

Philosophy Circle

The Philosophy Circle is a group of more than 140 faculty, alumni, and friends whose donations support special departmental activities, including awards for outstanding student papers and funding for the Dr. Thomas and Albert Shipka Speakers Series. The Shipka Speakers Series has sponsored over 40 lectures by outstanding scholars, on topics related to philosophy and religious studies that are of wide interest to both the university and the larger community. For videos of recent talks, see the Shipka Speakers Series (http://philrel.ysu.edu/shipka-speakers-series/) page.
Departmental Scholarships

The programs of Philosophy and Religious Studies offer the following scholarships. Please contact the department office for more information.

- Evangelos Michelakis Meshel Scholarship in Philosophy
- Robert G. & S. Ann Berich Meigetter Scholarships in Philosophy
- Dr. Earl Eugene Eminiher Scholarship in Religious Studies
- Sister Jean Gillespie Memorial Award in Religious Studies
- Bevan-Dillingham Scholarship in Philosophy and Religious Studies
- Helen Pavlov Memorial Scholarship in Philosophy and Religious Studies

 Philosophy and Religious Studies Club

The Philosophy and Religious Studies Club is a student-run group open to all persons interested in philosophy and religious studies. The club hosts an annual educational fundraiser that showcases the interests of a department faculty member. Topics vary for this popular evening complete with music, food, and wine tasting. The students also organize bi-monthly “Eat Drink Think” events (EDT), which are social events focused on classic and modern texts held over food and drinks. EDT events provide a nice forum for majors, non-majors, and community members to delve deeply into persistent questions in philosophy and religion and their relation to public policy, national and global events, and academics. For more information, please visit Philosophy and Religious Studies Department (http://www.ysu.edu/philrel/) website and join our Facebook (https://www.facebook.com/pages/YSU-Philosophy-and-Religious-StudiesDepartment/188613781180674/) group, “YSU Philosophy and Religious Studies Club,” for updates about upcoming events.

Chair
Alan E. Tomhave, Ph.D., Associate Professor, Acting Chair

Professor
Michael K. Jerryson, Ph.D., Professor
Mustansir Mir, Ph.D., Professor
Gabriel Palmer-Fernandez, Ph.D., Professor
Mark C. Vopat, Ph.D., Professor

Lecturer
Robyn Gaier, Ph.D., Lecturer

Majors
- Philosophy Major (p. 225)
- Religious Studies Major (p. 227)
- Philosophy Major, Pre-Counseling Tracks (p. 227)
- Religious Studies Major, Pre-Counseling Tracks (p. 228)

Minors
- Professional Ethics Minor (p. 229)
- Philosophy Minor (p. 229)
- Religious Studies Minor (p. 229)
- Islamic Studies Minor (p. 228)

Philosophy

PHIL 1560 Introduction to Philosophy 3 s.h.
The nature of philosophy and its relation to science, religion, and art; study of the philosophical approach and attitude, the basic problem areas in philosophy, and some typical philosophical viewpoints.
Gen Ed: Arts and Humanities.

PHIL 1561 Technology and Human Values 3 s.h.
An examination of the impact of technology and science on contemporary human values and investigations of social and political perspectives on modern technocracy, based on case studies in science, medicine, and engineering.
Gen Ed: Arts and Humanities.

PHIL 1565 Critical Thinking 3 s.h.
An examination of the logical skills needed for critical thinking in practical situations. Topics include procedures and guidelines for identifying and evaluating arguments, recognizing and eliminating informal fallacies, and writing and critiquing argumentative essays.
Gen Ed: Arts and Humanities.

PHIL 2608 The Examined Life 3 s.h.
Considers the nature of happiness and well-being and their relation to social institutions. Addresses the roles that civic and personal relations, morality, aesthetics, education, and religion play in providing happiness, purpose, and meaning in one’s life. Cross listed as REL 2608.
Gen Ed: Arts and Humanities.

PHIL 2610 Global Ethics 3 s.h.
Examination of morality and justice from a global perspective, including such topics as war, terrorism, and states; poverty and the global economy; religion, gender, and identity; globalization and the environment; and markets and intellectual property. Cross-listed as REL 2610.
Gen Ed: Arts and Humanities.

PHIL 2612 Ancient & Medieval Philosophy 3 s.h.
An examination of philosophers and philosophical systems in Western civilization from the pre-Socratics until the Renaissance.

PHIL 2619 Introduction to Logic 3 s.h.
Introduction to syllogistic or classical logic, symbolic and inductive logic. Emphasis on the rules of syllogism, immediate inferences, propositional functions, classes, truth tables, Venn diagrams; the use of analogy, generalization, the verification of hypotheses, and scientific method.
Prereq.: MATH 1501 or at least Level 20 on the Mathematics Placement Test.
Gen Ed: Mathematics.

PHIL 2625 Introduction to Professional Ethics 3 s.h.
An examination of the ideals and virtues central to professionalism; study of selected codes of professional ethics and their roots in classical ethical traditions; and analysis of selected ethical issues and problems in a variety of professions.
Gen Ed: Arts and Humanities.

PHIL 2626 Engineering Ethics 3 s.h.
An examination of ethical problems in the major fields of engineering and an explanation of the methodology needed to address them; an analysis of the rights and duties of engineers in their relations to clients, employers, the public, and the engineering profession.
Prereq.: One 2600-level PHIL course, or PHIL 1560 or ENTC 1505 or ENGR 1550.
Gen Ed: Arts and Humanities.

PHIL 2627 Law and Criminal Justice Ethics 3 s.h.
Examination of major theories in philosophy of law and justice, and the study of ethical issues and professional standards in criminal justice practice.
Prereq.: Any 2600-level PHIL course or PHIL 1560 or CJFS 2601, CJFS 2602 or CJFS 2603.
Gen Ed: Arts and Humanities.

PHIL 2628 Business Ethics 3 s.h.
Examines ethical problems in business, ethical responsibilities of business professional, and business as a global institution. Topics include the corporation, at-will employment, unions, technology, privacy, advertising, whistle-blowing, globalization, environmental impact, human rights, just distribution, affirmative action and cultural diversity.
Gen Ed: Arts and Humanities.
PHIL 2631 Environmental Ethics 3 s.h.
Application of ethical theories in evaluating human interaction with the natural environment, analysis of rights and duties regarding other species and future generations, the ethics of environmental activism, and philosophical and religious perspectives on environmental issues.
Gen Ed: Environmental Sustainability, Social and Personal Awareness.

PHIL 2635 Ethics of War and Peace 3 s.h.
Examines reasons for making war, for restraint on the conduct of war, and for rejecting war as an instrument of national policy as understood within a variety of moral traditions, both secular and religious.
Gen Ed: Arts and Humanities.

PHIL 2698 Introductory Individual Study in Philosophy 1 s.h.
Introductory study of a philosophical problem, movement, thinker, or the relationship of philosophy to problems in other disciplines. Intended to be an independent study course with subject matter dependent upon approval of the faculty member and student. May be repeated up to 3 s.h.

PHIL 3702 History of Modern Philosophy 3 s.h.
Study of major Western philosophical figures and movements from the Renaissance through the 19th century.
Prereq.: One 2600-level PHIL course or PHIL 1560.

PHIL 3708 Social and Political Philosophy 3 s.h.
A study of the philosophical foundations of democracy, dictatorship, and communism, especially their views of reality, knowledge, human nature, and morality, with attention to rights, duties, freedom, authority, dissent, censorship, crime and punishment, and religion.
Prereq.: PHIL 1560.

PHIL 3711 General Ethics 3 s.h.
Examination and evaluation of the major ethical theories in classical, dialectic, pragmatic and naturalistic, analytic and positivist, and existentialist thought.
Prereq.: PHIL 1560.
Gen Ed: Arts and Humanities.

PHIL 3712 Philosophy of Religion 3 s.h.
The philosophical investigation of religious questions such as existence and nature of the divine, the problem of evil, death and immortality, religion and science, and religious experience.
Prereq.: PHIL 1560 or REL 2601.
Cross listed with REL 3712.

PHIL 3713 Philosophy of the Family 3 s.h.
Examines the family from philosophical, political, and historical perspectives and considers issues of justice in familial relationships. Explores the relationship among parents, children, and the state, and reviews the evolving conceptions of childhood, child well-being, and children’s rights.
Prereq.: ENGL 1551.

PHIL 3714 Language and Mind 3 s.h.
Introduction to the study of traditional philosophical problems in the analysis of linguistic structures and functions and of their implications for the nature of mind, including meaning, mental representation and causation, information processing, and psychological explanation.
Prereq.: One 2600-level PHIL course or PHIL 1560.

PHIL 3715 Philosophy of Science 3 s.h.
A philosophical consideration of some of the fundamental concepts and assumptions of the sciences: the nature of scientific knowledge; the relation of scientific to other kinds of knowledge and experience.
Prereq.: PHIL 1560.

PHIL 3719 Symbolic Logic 3 s.h.
The structure and properties of axiomatic systems; the theory of propositional and relational logic; the algebra of classes; related topics.
Prereq.: PHIL 2619.

PHIL 3723 Philosophy of Law 3 s.h.
Examination of the nature and limits of law, the justification of the legal system, the relationship between law and morality, state punishment of individuals, the justification for punishment, citizens’ rights and issues of privacy, liberty, discrimination, and civil disobedience.
Prereq.: One 2600-level PHIL course or PHIL 1560.

PHIL 3725 Biomedical Ethics 3 s.h.
An examination of ethical issues posed by biomedical research and technology, including issues of informed consent, patients’ rights, experimentation, genetic research and intervention, death and dying, and the allocation of scarce resources.
Prereq.: One 2600-level PHIL course or SOC 3703 or SOC 3745 or PSYC 3780 or admission to the NEOMED-YSU program or the BS in Nursing program.

PHIL 3735 Ethics and Scientific Research 3 s.h.
Definition and examination of the ethical basis of scientific conduct in reporting experimental results, using human and animal subjects, adopting protocols, and pursuing research with broad impact on human rights and social welfare.
Prereq.: PHIL 1560 or PHIL 2625.

PHIL 3740 Muslim Thinkers and Thinkers 3 s.h.
Examination of the theological, philosophical, legal, and political writings and ideas of major Muslim thinkers and mystics from the classical through the modern period, covering the continuities and differences.
Prereq.: Any 2600-level REL course or PHIL 1560.
Cross listed with REL 3740.

PHIL 3745 Classical Asian Philosophy 3 s.h.
Focus is on selected classical philosophical texts in Hinduism, Buddhism, Confucianism, and Taoism.
Prereq.: Any lower division course in Philosophy or ASST 1550.

PHIL 3798 Intensive Individual Study of Philosophy 1 s.h.
Intensive study of a philosophical problem, movement, thinker, or the relationship of philosophy to problems in other disciplines. Intended to be an independent study course with subject matter dependent upon approval of the faculty member and student. May be repeated up to 3 s.h.
Prereq.: One 3700-level PHIL course.

PHIL 4805 Direct Readings in Philosophy 3 s.h.
Independent study course with subject matter dependent upon approval of the faculty member in consultation with student.
Prereq.: Any 3700 level PHIL course.

PHIL 4820 Seminar in Philosophy 3 s.h.
Study in depth of a particular philosopher, topic, or area in philosophy, as determined by the instructor; may be repeated once with different course content.
Prereq.: One 3700-level PHIL course.

PHIL 4820T Seminar in Philosophy How to be Stoic 3 s.h.
Study in depth of a particular philosopher, topic, or area in philosophy, as determined by the instructor; may be repeated once with different course content.
Prereq.: One 3700-level PHIL course.

PHIL 4859 Capstone Cooperative Seminar 1 s.h.
The course aids capstone students in developing and following a schedule for timely completion of a major research project, provides general direction on effective methods for working on such a project, and encourages and facilitates cooperative work among advanced students by providing peers with whom to discuss their ideas, exchange drafts, and provide constructive comments on ongoing written work. Must be taken concurrently with PHIL 4861.

PHIL 4861 Senior Capstone Project 3 s.h.
Research and writing of a paper, or other committee approved project, on a philosophical topic, under the supervision of a full-time faculty member and in consultation with a committee of at least two other members of the department.
Prereq.: Philosophy major with senior standing and completion of at least 21 s.h. of PHIL courses.
PHIL 4870 Internship in Ethical Practice  1-3 s.h.
Students work with professionals in a local organization, thereby gaining direct access to the ethical issues involved in such an environment. Students will be supervised by an appropriate working professional and either a faculty member of the Dr. James Dale Ethics Center or another faculty member in the department selected for this purpose. The course grade shall be assigned by the YSU supervisor, based on the project journal, an evaluation of the student's on-site work by the participating professional and the YSU supervisor, and a final project paper. Registration by permit only. 1 s.h., repeatable to a total of.
Prereq.: One 3700-level PHIL or REL course.

Religious Studies

REL 2601 Introduction to World Religions  3 s.h.
A survey of the major world religions exploring their distinctive features and common threads. A study of their founders, systems of thought, symbols, and sacred literatures.
Gen Ed: Arts and Humanities, International Perspectives, Social and Personal Awareness.
REL 2602 Introduction to Religious Studies  3 s.h.
Examines the religious features of doctrines, myths or practices and surveys various methods by which religion is explored and scrutinized.
REL 2605 Myth, Symbol, and Ritual  3 s.h.
An introduction to the nature and function of myth, symbol, and ritual. Myth interpretation, the relationship between societies and their myths, and the cultural use of myths, symbols, and rituals in religious and spiritual contexts.
Gen Ed: Arts and Humanities.
REL 2608 The Examined Life  3 s.h.
Considers the nature of happiness and well-being, their relation to social institutions, and the roles that civic and personal relations, morality, aesthetics, education, and religion play in providing happiness, purpose, and meaning in one's life. Cross-listed as PHIL 2608.
REL 2610 Global Ethics  3 s.h.
Examination of morality and justice from a global perspective, including such topics as war, terrorism, and states; poverty and the global economy; religion, gender, and identity; globalization and the environment; and markets and intellectual property. Cross-listed as PHIL 2610.
Gen Ed: Arts and Humanities.
REL 2611 Judaism Christianity and Islam  3 s.h.
Judaism, Christianity, and Islam. Examines the origins, foundational texts, beliefs and practices, intellectual and spiritual dimensions, and cultural norms and values of each religion, as well as the structures of authority in the community founded by each religion and the factors that have promoted the survival of each.
REL 2617 Introduction to Asian Religions  3 s.h.
A survey of the religions of India, China, and Japan, their systems of thought, moral values, and methods of personal transformation.
Gen Ed: Arts and Humanities, International Perspectives, Social and Personal Awareness.
REL 2621 Religion and Moral Issues  3 s.h.
The relation of specific religious and moral issues to questions of personal conduct and social policy.
Gen Ed: Arts and Humanities.
REL 2623 Introduction to Christianity  3 s.h.
Introduction to the Christian religion, exploring its origins, emergence as the official religion of the Roman Empire, and global expansion into one of the largest religions of the world. Attention is given to core beliefs, events, and persons of significant impact, to the diversity of approaches available within the Christian tradition, and to such contemporary issues as gender, the environment, and war. No familiarity is presupposed with the Bible, Christianity, or the academic study of religion.
REL 2624 Introduction to Buddhism  3 s.h.
Introduces the wide range of Buddhist traditions throughout the world and especially in the diverse area of Asia. By examining unique Buddhist practices, beliefs, rituals and ideas, a better understanding of those who practice Buddhism is gained.
REL 2631 Religion and the Earth  3 s.h.
A cross-cultural survey of the religious beliefs and values that have shaped our thinking about the earth. An exploration of the shifts in religious thought called for by the ecological crisis of sustainability.
Gen Ed: Arts and Humanities, Environmental Sustainability, Social and Personal Awareness.
REL 2632 Jesus and the Gospels  3 s.h.
The life and teachings of Jesus in their historical context. Examination of the ways in which Jesus is interpreted within the synoptic gospels.
REL 2699 Introductory Individual Study in Religious Studies  1 s.h.
Introductory study of a religious studies problem, movement, thinker, or the relationship of religious studies to problems in other disciplines. Intended to be an independent study course with subject matter dependent upon approval of the faculty member and student. May be repeated up to 3 s.h.
REL 3708 African-American Religion  3 s.h.
Development of African-American religion and theology from the days of slavery to the present.
Prereq.: 12 credits of undergraduate coursework.
REL 3710 African and Neo-African Religion  3 s.h.
A study of African religious traditions and their pivotal role in the formation of African civilizations and communities in the African diaspora, including their adaptations of Islam and Christianity.
Prereq.: 12 credits of undergraduate coursework.
REL 3712 Philosophy of Religion  3 s.h.
The philosophical investigation of religious questions such as existence and nature of the divine, the problem of evil, death and immortality, religion and science, and religious experience.
Prereq.: 12 credits of undergraduate coursework.
REL 3720 The World of Islam  3 s.h.
The study of the origins and development of classical and modern Islam, including the Prophet Muhammad, the Quran, and Muslims in America.
Prereq.: 12 credits of undergraduate coursework.
REL 3722 Popes Saints and Rebels  3 s.h.
The origin and development of Christianity; examination of the life and teachings of Jesus; Christian theology, liturgy, and symbolism; and divisions of contemporary Christianity.
Prereq.: 12 credits of undergraduate coursework.
REL 3723 History of Christian Thought  3 s.h.
The origin and development of Christianity; examination of the life and teachings of Jesus; Christian theology, liturgy, and symbolism; and divisions of contemporary Christianity.
Prereq.: 12 credits of undergraduate coursework.
REL 3726 Buddhist Beliefs Practices and Debate  3 s.h.
An Introduction to Buddhist traditions, their historical development in countries like India, China, Tibet and Thailand, and Buddhist positions on contemporary issues. Special attention to practices, beliefs, and ethics.
Prereq.: 12 credits of undergraduate coursework.
REL 3728 Hindu Traditions  3 s.h.
Examines Yoga, meditation, karma, reincarnation, and major devotional and ceremonial traditions that have developed around Shiva, Vishnu, and the Goddess. A central part of the course is the study of the dynamics between popular worship and the contemplative traditions of Hindu culture.
Prereq.: 12 credits of undergraduate coursework.
REL 3731 Hebrew Scriptures  3 s.h.
A critical analysis of the Hebrew scriptures in terms of historical background, textual development, and religious and ethical themes.
Prereq.: One 2600-level REL course or JUDC 1500.
REL 3732 Jesus and the Gospels 3 s.h.
The life and teachings of Jesus in their historical context. Examination of the ways in which Jesus is interpreted within the synoptic gospels. Prereq.: One 2600-level REL or PHIL course 3740. Muslim Thinkers. Examination of the theological, philosophical, legal, and political writings and ideas of major Muslim thinkers from the classical through the modern period, covering the continuities and differences. Prereq.: any 2600-level REL course or PHIL 1560. Cross listed with REL 3740.

REL 3733 Women And the Bible 3 s.h.
A study of Biblical interpretation utilizing narratives that portray women in Hebrew and Christian Scriptures. Students will learn analytical skills required for narrative interpretation and exegetical analysis. Prereq.: 12 credits of undergraduate coursework.

REL 3740 Muslim Thinkers and Mystics 3 s.h.
Examination of the theological, philosophical, legal, and political writings and ideas of major Muslim thinkers and mystics from the classical through the modern period, covering the continuities and differences. Prereq.: 12 credits of undergraduate coursework. Cross listed with PHIL 3740.

REL 3743 Reform, Revolt, or Revolution in Islam 3 s.h.
Critical examination of the movements of change in Islam intended to (1) reassert the primacy of Islamic religious norms in society (reform); (2) challenge the dominant political structures (revolt); or (3) bring about a radical societal change (revolution). The course examines in depth the use of Islamic motifs and symbols in all these movements. Prereq.: REL 2601 or POL 1550 or permission of instructor.

REL 3744 Islamic Culture and Literature 3 s.h.
Introduction to the diversity of Muslim culture and literature across the world. Emphasis on classical and premodern literature, art and architecture. Prereq.: 12 credits of undergraduate coursework.

REL 3748 Islam and the West 3 s.h.
Examination of the historical relationship between the and Islamic and Western worlds, as well as their interaction in modern contexts. Prereq.: 12 credits of undergraduate coursework.

REL 3750 Religion and Race 3 s.h.
Examines race theory and its relation to religious studies through consideration of immigration patterns and the ways in which religion has been affixed to markers of identity over the last two hundred years. Prereq.: 12 credits of undergraduate coursework. Cross-listed: SOC 3750 and ANTH 3750.

REL 3751 Liberation Theologies and Revolutionary Change 3 s.h.
Study of liberation theologies in the Third World and in minority communities in the West, in relation to questions of underdevelopment, poverty, and oppression. Prereq.: 12 credits of undergraduate coursework.

REL 3753 Religion and Violence 3 s.h.
Examines the various approaches to explaining religiously justified violence, focusing on examples from the Middle East, South Asia, Southeast Asia, and East Asia. A central element of the course explores the gap between religious ideals and practices and the importance of recognizing that distinction. Prereq.: REL 2601 or POL 1550.

REL 3754 Feminism, Ecology and Religion 3 s.h.
Investigation of religious perspectives related to women and nature, the relationship of the sacred to the natural world, scriptural and theological influences, and deep ecology and other environmental movements from a feminist perspective. Prereq.: 12 credits of undergraduate coursework.

REL 3756 Psychology of Religion 3 s.h.
Survey of developments in depth psychology that have shaped our understanding of religious experience and spirituality. Prereq.: PSYC 1560 or one 2600-level REL course.

REL 3760 Sex and Religion 3 s.h.
Explores the tensions between religion and sex through the Western and non-Western lens. Divided into sections, this course covers attitudes toward sex by early modern Christians, a few non-Western religious traditions and contemporary Western religion. Prereq.: h.

REL 3799 Intensive Individual Study in Religious Studies 1 s.h.
Intensive study of a religious studies problem, movement, thinker, or the relationship of religious studies to problems in other disciplines. Intended to be an independent study course with subject matter dependent upon approval of the faculty member and student. May be repeated up to 3 s.h. Prereq.: One 3700 level REL course.

REL 4810 Directed Readings in Religious Studies 3 s.h.
Independent study course with subject matter dependent upon approval of the faculty member in consultation with student. Prereq.: Any 3700 level REL course.

REL 4820 Special Topics in Religious Studies 3 s.h.
Selected topics in religious studies. Topic to be announced each time the course is offered. Prereq. 12 credits of undergraduate coursework.

REL 4825 Methods and Study of Religion 3 s.h.
This course explores the principal methodological issues in the scholarly study of religion and enables students to expand and synthesize disciplinary knowledge. Prereq.: REL 2601.

REL 4850 Seminar in Religious Studies 3 s.h.
Study in depth of a particular figure, topic or area in religious studies, as determined by the instructor; may be repeated once with different course content. Prereq.: One 3700-level REL course.

REL 4850G Seminar in Religious Studies Stigma and Resilience 3 s.h.
Study in depth of a particular figure, topic or area in religious studies, as determined by the instructor; may be repeated once with different course content. Prereq.: One 3700-level REL course.

REL 4860 On-Site Studies in Religion 3-9 s.h.
An on-site investigation of the beliefs and practices of a particular religion or sect through readings, lectures, interviews, and travel to locations vital to its origin or development. Prereq.: Two 3700-level REL courses.

REL 4869 Capstone Cooperative Seminar 1 s.h.
The course aids capstone students in developing and following a schedule for timely completion of a major research project, provides general direction on effective methods for working on such a project, and encourages and facilitates cooperative work among advanced students by providing peers with whom to discuss their ideas, exchange drafts, and provide constructive comments on ongoing written work. Must be taken concurrently with REL 4871.

REL 4871 Senior Capstone Project 3 s.h.
Research and writing of a paper, or other committee approved project, on a topic in religious studies, under the supervision of a full-time faculty member and in consultation with a committee of at least two other members of the department. Prereq.: Religious Studies major with senior standing and completion of at least 21 s.h. of REL courses.

Bachelor of Arts in Philosophy

The mission of the philosophy program is to foster greater understanding and appreciation of the value of philosophical inquiry and the examination of perennial questions about the nature of human experience, the purpose of human endeavors individually and communally, and the value of knowledge. We create diverse educational experiences that develop ethical, intellectually curious students who are invested in their communities. By developing critical, logical, and creative thinking, sound judgment, and effective civil
communication, we produce students who can engage their philosophical reasoning in the service of solving real-world problems, attending to the ethical issues and theoretical complexities of purpose, policy, and implementation.

A major in philosophy is ideal for students who plan to enter the field of philosophy, law, professional or medical ethics, the ministry, or other fields requiring a liberal arts background.

The major consists of 31 semester hours, including:

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<tr>
<th>COURSE</th>
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<tr>
<td><strong>FIRST YEAR REQUIREMENT - STUDENT SUCCESS</strong></td>
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<tr>
<td>YSU 1500</td>
<td>Success Seminar</td>
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<tr>
<td>or SS 1500</td>
<td>Strong Start Success Seminar</td>
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<tr>
<td>or HONR 1500</td>
<td>Intro to Honors</td>
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**General Education Requirements**

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<tr>
<td>ENGL 1550</td>
<td>Writing 1</td>
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<tr>
<td>or ENGL 1549</td>
<td>Writing 1 with Support</td>
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<tr>
<td>ENGL 1551</td>
<td>Writing 2</td>
<td>3</td>
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<td>CMST 1545</td>
<td>Communication Foundations</td>
<td>3</td>
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<tr>
<td>Mathematics Requirement</td>
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<tr>
<td>Arts and Humanities (6 s.h.)</td>
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<tr>
<td>Natural Sciences (2 courses, 1 with lab) (6-7 s.h.)</td>
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<tr>
<td>Social Science (6 s.h.)</td>
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<td>Social and Personal Awareness (6 s.h.)</td>
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**Foreign Language Requirement**

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<tr>
<td>FNGL 1550</td>
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**Major Requirements**

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<td>PHIL 1560</td>
<td>Introduction to Philosophy</td>
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<tr>
<td>PHIL 2619</td>
<td>Introduction to Logic</td>
<td>3</td>
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<tr>
<td>PHIL 2612</td>
<td>Ancient &amp; Medieval Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 3702</td>
<td>History of Modern Philosophy</td>
<td>3</td>
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<tr>
<td>PHIL 3711</td>
<td>General Ethics</td>
<td>3</td>
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<tr>
<td>PHIL 4820</td>
<td>Seminar in Philosophy</td>
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<tr>
<td>Philosophy Electives (Three additional courses in Philosophy, 2 of which must be at the 3700-level or 4800-level.)</td>
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<td>PHIL 4859</td>
<td>Capstone Cooperative Seminar</td>
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<td>PHIL 4861</td>
<td>Senior Capstone Project</td>
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<td>Minor Electives</td>
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<tr>
<td>All Electives Must complete a minimum number of electives to meet the 120th total graduation requirement</td>
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**Total Semester Hours**

120-122

This program can be completed in eight semesters if students enroll in 16 hours per semester and enroll in a combination of day and evening classes. The hours for the degree could increase depending upon the student’s foreign language placement upon entering YSU.

**Year 1**

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<tr>
<th>COURSE</th>
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<tr>
<td>YSU 1500</td>
<td>Success Seminar</td>
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<td>Introduction to Philosophy</td>
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<tr>
<td>CMST 1545</td>
<td>Communication Foundations</td>
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<tr>
<td>ENGL 1550 or ENGL 1549</td>
<td>Writing 1 or Writing 1 with Support</td>
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<tr>
<td>First Year Experience</td>
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<td>FNGL 1550</td>
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**Year 2**

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<td>PHIL 2612</td>
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<tr>
<td>ENGL 1551</td>
<td>Writing 2</td>
<td>3</td>
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<td>PHIL 2631</td>
<td>Environmental Ethics</td>
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<td>Intermediate Foreign Language</td>
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<td>PHIL 2619</td>
<td>Introduction to Logic</td>
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<td>Natural Science 15XX/26XX</td>
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<tr>
<td>Minor 15XX/26XX</td>
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<td>3</td>
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<td>Social and Personal Awareness 15XX/26XX</td>
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**Year 3**

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<tr>
<td>PHIL 3702</td>
<td>History of Modern Philosophy</td>
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<td>General Education 26XX</td>
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<td>PHIL Elective 37XX</td>
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**Year 4**

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<tr>
<td>PHIL 4820</td>
<td>Seminar in Philosophy</td>
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<td>Minor 37XX course</td>
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<td>3</td>
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<tr>
<td>Elective 37XX</td>
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<td>Elective 37XX</td>
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**Spring**

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<tr>
<td>PHIL 4861</td>
<td>Senior Capstone Project</td>
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<td>PHIL 4859</td>
<td>Capstone Cooperative Seminar</td>
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<td>Minor 37XX course</td>
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<td>Elective 37XX</td>
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**Total Semester Hours**

122-123
Learning Objectives

- Demonstrated reasoning ability (competently utilize principles of critical thinking, including assessment of definitions, recognition of fallacies, and application of the principles of good inductive and deductive reasoning).
- Demonstrated ability to articulate philosophical ideas and arguments (clarity, nuance, and sophistication of content) and knowledge of seminal figures in history who espouse them.
- Demonstrated ability to engage in charitable reading (willingness to consider alternative and plausible interpretations of an author’s work) and to consider arguments from the standpoint and experience of others (suspend one’s personal views).
- Master the basics of theoretical writing, including the development of precise definitions, effective analysis of texts, traditions, and theoretical positions, and effective development, defense, and critique of arguments.
- Demonstrated ability to revise beliefs, ideas, and arguments when presented with new sources, criticism, and evidence or to withhold judgment in the absence of reasons (reasonable disagreement and intellectual humility).

Bachelor of Arts in Religious Studies

Religious Studies, also known as Comparative Religion, the Science of Religion, or the academic study of religion, is a part of the human sciences, and it engages in the analysis of cross-cultural religious phenomena. As such, the mission of Religious Studies is to foster critical awareness of the role religion in society, the ways in which people’s values and worldviews shape their involvement in the world, such as business, law, and government, and to provide tools for students to track and measure these developments socially and reflectively in themselves.

<table>
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<tr>
<th>COURSE</th>
<th>TITLE</th>
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<tbody>
<tr>
<td>REL 3726</td>
<td>Buddhist Beliefs Practices and Debate</td>
<td>3</td>
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<tr>
<td>REL 3744</td>
<td>Islamic Culture and Literature</td>
<td>3</td>
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<tr>
<td>REL 3748</td>
<td>Islam and the West</td>
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<tr>
<td>REL 2611</td>
<td>Judaism Christianity and Islam</td>
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<td>REL 3732</td>
<td>Jesus and the Gospels</td>
<td>3</td>
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<td>REL 3722</td>
<td>Popes Saints and Rebels</td>
<td>3</td>
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<td>REL 3731</td>
<td>Hebrew Scriptures</td>
<td>3</td>
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<td>REL 3733</td>
<td>Women And the Bible</td>
<td>3</td>
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<td>ANTH 4815</td>
<td>Anthropology of Religion</td>
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<tr>
<td>JUDC 1500</td>
<td>Introduction to Jewish Studies</td>
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<tr>
<td>HIST 3789</td>
<td>Jewish History</td>
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Analytics - Select one course from two of the analytic groups: 6

Political Science:
- REL 2610 Global Ethics
- REL 2631 Religion and the Earth
- REL 3743 Reform, Revolt, or Revolution in Islam
- REL 3744 Islamic Culture and Literature
- REL 3751 Liberation Theologies and Revolutionary Change
- REL 3753 Religion and Violence
- HIST 3788 The Holocaust

Anthropology:
- REL 3728 Hindu Traditions
- ANTH 4815 Anthropology of Religion

Sociology:
- REL 3750 Religion and Race

Philosophy:
- REL 2608 The Examined Life
- REL 2621 Religion and Moral Issues
- REL 3712 Philosophy of Religion
- REL 3754 Feminism, Ecology and Religion

Psychology:
- REL 3756 Psychology of Religion

Remaining Hours:
- REL 4850 Seminar in Religious Studies 3
- REL 4869 Capstone Cooperative Seminar 1
- REL 4871 Senior Capstone Project 3
- Religious Studies Electives 6

Minor 18

Electives Must complete a minimum number of electives to meet the 120sh total graduation requirement

Total Degree Hours = 120 s.h.

Year 1

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<td>REL 2602</td>
<td>Introduction to Religious Studies</td>
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<td>or ENGL 1549</td>
<td>or Writing 1 with Support</td>
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Spring

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<tbody>
<tr>
<td>REL 37XX Group A</td>
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<td>Social Science 15XX/26XX</td>
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<td>ENGL 1551</td>
<td>Writing 2</td>
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<td>REL 37XX Group B</td>
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Minor in Asian Studies

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<td>Required Course:</td>
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<tr>
<td>ASST 1550</td>
<td>Introduction to Asian Studies</td>
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<tr>
<td>CHIN 1550</td>
<td>Elementary Chinese</td>
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<td>CHIN 2600</td>
<td>Intermediate Chinese</td>
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<tr>
<td>FNLG 1550</td>
<td>Elementary Foreign Language</td>
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<td>FNLG 2600</td>
<td>Intermediate Foreign Language</td>
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<td>OR another Asian-based foreign language</td>
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<td>FNLG 3799</td>
<td>Study Abroad in Foreign Language</td>
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<td>Select 9 s.h. from the following courses:</td>
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<tr>
<td>ANTH 37600</td>
<td>Cult Old Wr Cult People China</td>
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<td>ART 3784</td>
<td>Art of China</td>
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<td>ART 3789</td>
<td>Arts of South and Southeast Asia</td>
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<td>ECON 3704</td>
<td>Emerging Economies in Asia</td>
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<td>HIST 3770</td>
<td>Asia to 1500</td>
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<td>PHIL 3745</td>
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<td>REL 4825</td>
<td>Methods and Study of Religion</td>
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<td>REL 4850</td>
<td>Seminar in Religious Studies</td>
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<tr>
<td>Elective XXXX</td>
<td>ST Culture and People of China</td>
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Total Semester Hours 19-23

Minor in Islamic Studies

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<td>REL 2601</td>
<td>Introduction to World Religions</td>
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<td>REL 3720</td>
<td>The World of Islam</td>
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<td>REL 3740</td>
<td>Muslim Thinkers and Mystics</td>
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</tr>
<tr>
<td>REL 3743</td>
<td>Reform, Revolt, or Revolution in Islam</td>
<td>9</td>
</tr>
<tr>
<td>REL 3744</td>
<td>Islamic Culture and Literature</td>
<td></td>
</tr>
<tr>
<td>REL 3748</td>
<td>Islam and the West</td>
<td></td>
</tr>
<tr>
<td>REL 4850</td>
<td>Seminar in Religious Studies (on appropriate topic, requiring approval by the Director of the Center for Islamic Studies)</td>
<td></td>
</tr>
</tbody>
</table>

Total Semester Hours 18

Learning Objectives

- Students will understand the various approaches to the study of religion under the field that is called Religious Studies. This is accomplished through enrollment in the two core courses, “Introduction to Religious Studies,” and “Methods and the Study of Religion.”
- Students will develop an appreciation of two discrete religious systems to allow for healthy comparisons. This is accomplished by fulfilling the requirement of taking one course from “Class A,” which addresses Christian and Jewish traditions, and “Class B,” which covers Islamic, Hindu, Buddhist, and African-American traditions.
- Students will accumulate two different methods to study religion. This is accomplished through the enrollment of one course from at least two different analytic groups: anthropology, philosophy, political science, psychology, and sociology.
Minor in Philosophy

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
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<tbody>
<tr>
<td>PHIL 1560</td>
<td>Introduction to Philosophy</td>
<td>3</td>
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<tr>
<td></td>
<td>Select at least 6 s.h. from the following:</td>
<td></td>
</tr>
<tr>
<td>PHIL 1561</td>
<td>Technology and Human Values</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 1565</td>
<td>Critical Thinking</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 2619</td>
<td>Introduction to Logic</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 2625</td>
<td>Introduction to Professional Ethics</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Select at least 3 s.h. from the following:</td>
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</tr>
<tr>
<td>PHIL 2612</td>
<td>Ancient &amp; Medieval Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 3702</td>
<td>History of Modern Philosophy</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Select at least 3 s.h. from the following:</td>
<td></td>
</tr>
<tr>
<td>PHIL 3711</td>
<td>General Ethics</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 3719</td>
<td>Symbolic Logic</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Any 3700- or 4800-level course in philosophy</td>
<td>3</td>
</tr>
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</table>

Total Semester Hours 18

Minor in Professional Ethics

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<td>Law and Criminal Justice Ethics</td>
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<td>PHIL 2628</td>
<td>Business Ethics</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 2631</td>
<td>Environmental Ethics</td>
<td>3</td>
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<tr>
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<td>Ethics of War and Peace</td>
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<td>Ethics and Scientific Research</td>
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Total Semester Hours 18

Politics and International Relations / Rigelhaupt Pre-Law Center

The program of Politics and International Relations is housed on the fourth floor of DeBartolo Hall. The professors who make up the program are considered experts in their fields and are often quoted in regional, national, and international publications.

In addition to the Political Science major, students can choose to focus on two additional areas: Public Management or Foreign Affairs. When receiving their degree, students will be given a certificate by the department certifying that they have completed either the Foreign Affairs or the Public Management track described in this Undergraduate Catalog. Four areas of study are offered as minors.

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For more information, please contact the Department of Humanities and Social Sciences at (330) 941-3456 or call the program offices at (330) 941-3436.

Pre-Law

Pre-Law Advisor: Dr. Paul Sracic

Pre-Law advisement is available in the Rigelhaupt Pre-Law Center to acquaint students with the various fields of legal practice, which require specialized undergraduate study, and to help students prepare for the law school entrance examination (LSAT).

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Lecturer

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Majors

• Political Science Major (p. 231)
• Foreign Affairs Track (p. 233)
• Public Management Program (p. 234)

Minors

• Minor in Peace and Conflict Studies (p. 234)
• Minor in Political Science (p. 234)
• Minor in American Politics (p. 234)
• Minor in Foreign Affairs (p. 234)

POL 1550 Introduction to Political Science 3 s.h.

Study of politics, government, and societal institutions at both national and international levels.

Gen Ed: International Perspectives, Social Science, Social and Personal Awareness.

POL 1560 American Government 3 s.h.

The foundations of American democratic government with an emphasis on the responsibilities of citizenship, civil rights, and civil liberties, parties and elections, and American political institutions. Students are encouraged to understand and discuss issues of social justice, equality and freedom, and majoritarianism. Topics include the civil rights movement, campaign finance reform, federalism, and affirmative action.

Gen Ed: Social Science.

POL 2640 Contemporary World Governments 3 s.h.

A comparative analysis of the development of institutions, attitudes, public policy, economic, and social systems of a number of foreign political systems.

Prereq.: POL 1550 or POL 1560.

Gen Ed: International Perspectives, Social Science, Social and Personal Awareness.

Minor in Professional Ethics

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Gen Ed: Social Science.

POL 2640 Contemporary World Governments 3 s.h.

A comparative analysis of the development of institutions, attitudes, public policy, economic, and social systems of a number of foreign political systems.

Prereq.: POL 1550 or POL 1560.

Gen Ed: International Perspectives, Social Science, Social and Personal Awareness.
POL 2695 Model United Nations 1 s.h.
A comparative study of foreign policy, contemporary global issues, international law, and international governmental organizations. Stresses interactive and role playing educational methodologies. Students are required to participate in one or more approved conference or field trips. May be repeated to a maximum of 3 s.h.
Prereq.: Consent of instructor.

POL 3700 American Presidency 3 s.h.
An examination of the role of the chief executive within the governmental framework. The offices of mayor and governor are treated, but the primary emphasis is on critical evaluation of the American presidency.
Prereq.: POL 1560.

POL 3701 American Legislative Process 3 s.h.
An examination of the lawmaking function. Emphasis on the United States Congress, with limited consideration of state and local government legislative practices.
Prereq.: POL 1560.

POL 3702 Law and Society 3 s.h.
The American judicial system, its institutional development and its role in policy determination, as evidenced in leading U.S. Supreme Court decisions. Limited coverage of state judicial systems.
Prereq.: POL 1560.

POL 3704 American Political Parties and Elections 3 s.h.
A descriptive analysis of the role of political parties in a democratic society, with emphasis on development of a theory of party, an examination of the history and characteristics of the American party system, and a quantitatively structured description of the national electorate.
Prereq.: POL 1560.

POL 3706 African-American Politics 3 s.h.
The politics of African Americans within American society in terms of organization, behavior, objectives, relative influence and power.
Prereq.: POL 1560 or AFST 2600.

POL 3707 Moot Court 1 3 s.h.
An introduction to appellate advocacy through the practical application of legal analysis and synthesis. This course analyzes one or two specific constitutional issues based on pre-determined U.S. Supreme Court cases. Students will analyze and synthesize Supreme Court decisions and present simulated oral argument as if before the U.S. Supreme Court based on those decisions. May be repeated for up to 6 s.h.
Prereq.: POL 3702 and consent of chairperson.

POL 3708 American Constitutional Law 1: Government Power, Structure, and Limits 3 s.h.
Constitutional interpretations by the Supreme Court based on the examination of leading cases. Focus is on the powers of Congress, the President, the Courts, and the States.
Prereq.: POL 3702.

POL 3709 American Constitutional Law 2: Civil Rights and Liberties 3 s.h.
Constitutional interpretations by the Supreme Court based on the examination of leading cases. Focus is on Civil Rights and Liberties.
Prereq.: POL 3702.

POL 3712 Political Behavior 3 s.h.
An introduction to the primary research theories, perspectives and methodologies common to the study of government and global affairs, including computerize quantitative analysis.
Prereq.: POL 1550 or POL 1560.

POL 3714 American Public Opinion 3 s.h.
An introduction to the origins, uses, effects, and analysis of public opinion, including a practicum in opinion polling requiring field work and computerized quantitative analysis.
Prereq.: POL 1550 or POL 1560.

POL 3717 Health Care Policy 3 s.h.
A comprehensive overview of the American healthcare system. Particular attention given to the design and implementation of the Affordable Care Act.h.
Prereq.: BIO 1545 or EMS 1501 or MATC 2600 or MLT 1501 or AHLT major or POL 1560 or permission of instructor 3 s.

POL 3718 American Public Policy and Policy Analysis 3 s.h.
The formation, implementation, and evaluation of contemporary American public policy.
Prereq.: POL 1560.

POL 3720 Public Management 3 s.h.
A study of administrative organizations in American federal and state governments, with special attention to their role in the formulation and implementation of public policy as demonstrated in case studies.
Prereq.: POL 1560.

POL 3721 Urban Government 3 s.h.
The structure and politics of urban government, with special attention to intergovernmental relationships.
Prereq.: POL 1560.

POL 3722 State and Local Government 3 s.h.
The political processes and institutions of state and local governments, with special attention to Ohio government.
Prereq.: POL 1560.

POL 3724 Public Budgeting 3 s.h.
Study of the politics, theories, and techniques of public budgeting. Includes the process of budget preparation, adoption and execution. Topics include debt management and capital budgets. This course is cross-listed with ECON 3724.
Prereq.: POL 3720.

POL 3725 Individualized Study 1-3 s.h.
A supervised individual study of a special topic or issue in any area of contemporary politics and political science. An academic plan of study including a syllabus is required and will be placed in the student's file. May be repeated for up to 6 s.h.
Prereq.: POL 1560 or POL 2640 or POL 2660, and permission of the chairperson.

POL 3741 Russia and China: From Revolution to Reform 3 s.h.
A comparative analysis of politics in the Russian Federal Republic and the People's Republic of China, emphasizing contemporary issues of domestic governance and regional international relations as seen in the context of revolutionary Communism and the appearance of post-Communist reform politics.
Prereq.: POL 2640 or POL 2660 or ASST 1550.

POL 3742 Political Development and Political Regimes 3 s.h.
A comparative analysis of political development of selected states, with a focus on the social and political forces that lead to the formation of democracies and dictatorships.
Prereq.: POL 2640 or POL 2660.

POL 3744 European Politics 3 s.h.
Comparative analysis of the political development, governing systems, political behavior, public policy, and interrelations of selected European states, emphasizing the role of the European Union and the formation of new democracies in Eastern Europe.
Prereq.: POL 2640 or POL 2660.

POL 3751 Latin American Politics 3 s.h.
A comparative analysis of the political development, governing systems, political behavior, public policy, and international relations of selected Latin American states.
Prereq.: POL 2640 or POL 2660.
POL 3757 Aging and Social Policy 3 s.h.
Critical examination of the social policies and social systems which affect aging and retirement.
Prereq.: SOC 1500, GERO 1501, or POL 1560.

POL 3760 International Political Economy 3 s.h.
Study of the relationship between global capitalism and the interstate political system, with emphasis on post-Cold War issues and American policy.
Prereq.: POL 2660.

POL 3761 United States Foreign Policy 3 s.h.
Examination of the domestic political formulation and international execution of U.S. foreign policy, emphasizing regional issues of security and political economy and the changing U.S. role in the post-Cold War world.
Prereq.: POL 2640 or POL 2660.

POL 3763 International Law 3 s.h.
Analysis of the principles and formation of international law as it has developed through customs and international agreement.
Prereq.: POL 2640 or POL 2660.

POL 3764 International Organizations 3 s.h.
Analysis of the development, organizational structure, public policy and political behavior of regional and international organizations, with focus on the United Nations.
Prereq.: POL 2640 or POL 2660.

POL 3765 Israeli Politics 3 s.h.
A survey of the government and politics of the state of Israel, focusing on the role of Zionism, the various Israeli political parties, the problems of Israel's lack of a constitution, the operations of the Israeli parliamentary system, and the social, religious, economic, ethnic, cultural and foreign policy debates within Israeli government.
Prereq.: POL 2640 or POL 2660 or HIST 1511 or HIST 3788 or HIST 3789.

POL 3767 Asian Politics 3 s.h.
A comparative analysis of the political development, governing systems, political behavior, public policy, and international relations of selected Asian states, with emphasis on their role in the global economy relative to the U.S.
Prereq.: POL 2640 or POL 2660.

POL 3768 International Conflict 3 s.h.
Examination of the dynamics of international political conflict, with special attention to issues of the use of force, the nature of ethnonational conflict, and the relative effectiveness of various approaches to negotiation, conflict management, and conflict resolution.
Prereq.: POL 2660.

POL 3785 Political Thought 1 3 s.h.
The development of western political thought from the time of classical Greece through the Medieval period. Among major figures treated: Plato, Aristotle, Cicero, Augustine, Aquinas, and Machiavelli.
Prereq.: 9 s.h. of Political Science.

POL 3786 Political Thought 2 3 s.h.
The development of western political thought from the Renaissance to the Modern period. Among the major figures treated: Hobbes, Locke, Rousseau, Burke, Smith, Publius, Tocqueville, and Mill.
Prereq.: 9 s.h. of Political Science.

POL 3787 Political Thought 3 3 s.h.
The development of western political thought of the 19th and 20th centuries. Among the major figures treated: Hegel, Marx, Nietzsche, Arendt, and Rawls.
Prereq.: 9 s.h. of Political Science.

POL 4801 Senior Research Seminar 3 s.h.
Investigation and presentation of a research project. Students explore a research topic, using appropriate political science methods, and present their results in oral and written form.
Prereq.: 24 hours of political science.
Gen Ed: Capstone.

POL 4805 Public Administration and the Political Process 4 s.h.
Political factors which condition the structure and function of public agencies, including the public interest, agency constituencies, and political influence.
Prereq.: YSU/CSU MPA or permission of chair.

POL 4810 Urban Internship Seminar 2-4 s.h.
This course is designed to give students firsthand experience working in the field of public management, government, law, and/or urban public service. Intern appointments are for one semester. The internship is scheduled for fifteen (15) hours a week in the sponsor agency on a calendar confirmed with the agency supervisor. Interns are responsible to agency supervisors for satisfactory performance, as indicated by the supervisor’s signature on the weekly Journal Form, and on the end-of-the-term Summary Sheet.
Prereq.: Junior or senior standing; POL 1560; and acceptance into the program by the urban internship coordinator prior to registration.

POL 4850 Sustainability, Climate Change, and Society 3 s.h.
Explores environmental, economic, and social aspects of sustainable development, with an emphasis on economy and society. Examines the roles of institutions, humans and policies in sustainable development as well as reconfiguring relationships between our institutions and the natural world. Listed also as ENST 5820.
Prereq.: Minimum junior standing.

POL 5800 Select Problems, American Government 2-4 s.h.
Seminar/capstone course examining topical issues of American Government.
Prereq.: 15 s.h. of Political Science and consent of chairperson.

POL 5830 Public Human Resource Management 4 s.h.
The issues and public policies that have an impact on the management of human resources in the public sector. Differences between public and private personnel administration; the American civil service system; recruitment, placement, promotion, training, and compensation; performance assessment; rights and duties of public employees.
Prereq.: YSU/CSU MPA or permission of the chair.

POL 5850 Select Problems of Global Affairs 2-4 s.h.
Seminar/capstone course examining topical issues of contemporary global affairs and international relations. This course may be repeated once.
Prereq.: 15 s.h. of Political Science and consent of chairperson.

POL 5865 Global Environmental Policy and Law 3 s.h.
An analysis of the development, foundations, and principles of international environmental policy and law; includes consideration of the relationship between domestic and international environmental law, and the role of international organizations in the implementation of international environmental policy and law.
Prereq.: POL 3760, or POL 3742, or ENST 3760.

POL 5880 Select Problems, Political Thought 2-4 s.h.
Seminar/capstone course examining selected political issues and ideologies within the context of the broader traditions of political thought.
Prereq.: 15 s.h. of Political Science and consent of chairperson.

Bachelor of Arts in Political Science

Overview
A major in political science comprises 33 political science semester hours with the requirement that the student complete:

- a minimum of two courses in American Government
- a minimum of two courses from Comparative Government and International Relations
- one Political Thought course
- a capstone course

This degree may be earned in eight semesters if students enroll in 16 hours per semester.
Bachelor of Arts in Political Science

COURSE | TITLE | S.H.
---|---|---
**FIRST YEAR REQUIREMENT - STUDENT SUCCESS**
YSU 1500 | Success Seminar | 1-2
or SS 1500 | Strong Start Success Seminar | 1-2
or HONR 1500 | Intro to Honors | 1-2

General Education Requirements
ENGL 1550 | Writing 1 | 3-4
or ENGL 1549 | Writing 1 with Support | 3-4
ENGL 1551 | Writing 2 | 3
CMST 1545 | Communication Foundations | 3

Arts and Humanities (6 s.h.)
Natural Sciences (2 courses, 1 with lab) (6-7 s.h.)
Social Science (6 s.h.)
3 s.h. are fulfilled with POL 1560 (required for the major)

Social Science elective | 3
Social and Personal Awareness (6 s.h.) | 6

Foreign Language Requirement
FNLG 1550 | Elementary Foreign Language | 4
FNLG 2600 | Intermediate Foreign Language | 4

Mathematics Requirement
3

Arts and Humanities (6 s.h.)
Natural Sciences (2 courses, 1 with lab) (6-7 s.h.)
Social Science (6 s.h.)
3 s.h. are fulfilled with POL 1560 (required for the major)

Social Science elective | 3
Social and Personal Awareness (6 s.h.) | 6

American Government
Select one of the following:
POL 3700 | American Presidency | 3
POL 3701 | American Legislative Process | 3
POL 3702 | Law and Society | 3
POL 3703 | American Constitutional Law | 3
POL 3704 | American Political Parties and Elections | 3
POL 3707 | Moot Court 1 | 3
POL 3706 | African-American Politics | 3
POL 3712 | Political Behavior | 3
POL 3714 | American Public Opinion | 3
POL 3717 | Health Care Policy | 3
POL 3718 | American Public Policy and Policy Analysis | 3
POL 3720 | Public Management | 3
POL 3721 | Urban Government | 3
POL 3722 | State and Local Government | 3
POL 3724 | Public Budgeting | 3
POL 3725 | Individualized Study | 3
POL 3757 | Aging and Social Policy | 3
POL 4805 | Public Administration and the Political Process | 3
POL 4850 | Sustainability, Climate Change, and Society | 3
POL 5800 | Select Problems, American Government | 3
POL 5830 | Public Human Resource Management | 3

Political Thought
Select one of the following:
POL 3785 | Political Thought 1 | 3
POL 3786 | Political Thought 2 | 3
POL 3787 | Political Thought 3 | 3
POL 5880 | Select Problems, Political Thought | 3

Contemporary and International
Select two of the following:

Year 1
Fall S.H.
POL 1560 | American Government | 3
LASS 1510 | Exploring Critical Questions in LASS | 3
ENGL 1550 | Writing 1 | 3-4
or ENGL 1549 | Writing 1 with Support | 3-4
MATH 2623 | Quantitative Reasoning | 3
FNLG 1550 | Elementary Foreign Language | 4
Semester Hours | 16-17

Spring
POL 2640 | Contemporary World Governments | 3
POL 2660 | International Relations | 3
ENGL 1551 | Writing 2 | 3
CMST 1545 | Communication Foundations | 3
FNLG 2600 | Intermediate Foreign Language | 4
Semester Hours | 16

Year 2
Fall
POL 37XX Domestic Politics | 3
POL 37XX Dom. or Intl. | 3
Minor 15XX/26XX | 3
Natural Sience 15XX/26XX | 3
Social Science 15XX/26XX | 3
Semester Hours | 15

Spring
POL 37XX Dom. or Intl | 3
POL 37XX Dom. or Intl | 3
Minor 15XX/26XX | 3
Natural Science + Lab 15XX/2600 | 4
Social and Personal Awareness 15XX/26XX | 3
Semester Hours | 16
Learning Outcomes

The department's learning outcomes for political science majors are as follows:

- Students will be able to summarize fundamental components of knowledge that have developed in relation to areas of political theory, American government, comparative politics, and international relations.
- Students will recognize and explain the fundamental ideas and constitutional principles that have shaped the American Republic, as well as the institutions and behaviors that provide the setting and substance of American politics.
- Students will recognize and explain the basic ideas, problems and processes of comparative politics and international relations relative to issues of Western and non-Western political development, different forms of national government, and foreign policy behaviors relative to a global economy.
- Students will use and apply the Style Manual of the American Political Science Association (APSA) in conjunction with their research and writing skills associated with the creation of credible political science projects.

Foreign Affairs

The Foreign Affairs Track provides students with a broad background and understanding of international relations and comparative politics. Students study patterns of conflict and cooperation among nations, international organizations, and other international actors while developing a broader understanding of the problems of governance, justice, economic development, and political stability.

The program is designed to accommodate students seeking careers in such fields as diplomacy, international security, humanitarian and technical assistance, international education, international trade, and public affairs.

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
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<tbody>
<tr>
<td>ENGL 1550</td>
<td>Writing 1</td>
<td>3-4</td>
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<tr>
<td>or ENGL 1549</td>
<td>Writing 1 with Support</td>
<td></td>
</tr>
<tr>
<td>ENGL 1551</td>
<td>Writing 2</td>
<td>3</td>
</tr>
<tr>
<td>CMST 1545</td>
<td>Communication Foundations</td>
<td>3</td>
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<tr>
<td>Mathematics Requirement</td>
<td></td>
<td>3-4</td>
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<tr>
<td>Arts and Humanities</td>
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<td>6</td>
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<tr>
<td>Natural Science</td>
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<td>6-7</td>
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<tr>
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<tr>
<td>Social and Personal Awareness (Met in Major - HIST 1512, POL 2640)</td>
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Foreign Language Requirement

<table>
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</thead>
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<tr>
<td>FNLG 1550</td>
<td>Elementary Foreign Language</td>
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</tr>
<tr>
<td>FNLG 2600</td>
<td>Intermediate Foreign Language</td>
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</tbody>
</table>

Major Requirements

Select one course from each of the following:

Economics

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
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<tbody>
<tr>
<td>ECON 1501</td>
<td>Economics in Action</td>
<td>3</td>
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</table>

For students minoring in Economics, one of the following may be substituted:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 2610</td>
<td>Principles 1: Microeconomics (For students minoring in Economics)</td>
<td></td>
</tr>
<tr>
<td>ECON 2630</td>
<td>Principles 2: Macroeconomics (For students minoring in Economics)</td>
<td></td>
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</tbody>
</table>

Geography

<table>
<thead>
<tr>
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<th>S.H.</th>
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<tbody>
<tr>
<td>GEOG 2626</td>
<td>World Geography</td>
<td>3</td>
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<tr>
<td>GEOG 3713</td>
<td>Geography of South America</td>
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<tr>
<td>GEOG 3715</td>
<td>Geography of Middle America</td>
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<tr>
<td>GEOG 3717</td>
<td>Geography of Europe</td>
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History

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<tr>
<td>HIST 1512</td>
<td>World Civilization from 1500</td>
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Required Political Science Courses

<table>
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<tr>
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<tbody>
<tr>
<td>POL 1560</td>
<td>American Government</td>
<td>3</td>
</tr>
<tr>
<td>POL 2640</td>
<td>Contemporary World Governments</td>
<td>3</td>
</tr>
<tr>
<td>POL 2660</td>
<td>International Relations</td>
<td>3</td>
</tr>
<tr>
<td>POL 4801</td>
<td>Senior Research Seminar</td>
<td>3</td>
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</table>

Political Thought

Select one of the following:

<table>
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<tr>
<th>COURSE</th>
<th>TITIE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>POL 3785</td>
<td>Political Thought 1</td>
<td>3</td>
</tr>
<tr>
<td>POL 3786</td>
<td>Political Thought 2</td>
<td></td>
</tr>
<tr>
<td>POL 3787</td>
<td>Political Thought 3</td>
<td></td>
</tr>
</tbody>
</table>

Upper-Division Courses

Select a total of 15 s.h. from the courses listed below. A minimum of 6 s.h. must be taken from International relations area and a minimum of 6 s.h. from the Comparative Politics area.

International Relations

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>2-3</td>
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</table>
The multidisciplinary minor focuses on the historical, geographical, political, cultural, psychological, and philosophical dimensions of human conflict and
conflict resolution, emphasizing the cross-cultural and global context of
contemporary conflict situations and approaches to conflict management and
resolution.

The following is a list of approved recommended courses for the minor; the
minor consists of a minimum of 18 semester hours, of which at least nine
must be accumulated from approved upper-division courses (number 3700
and above).

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**Minor in American Politics**

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>POL 1560</td>
<td>American Government</td>
<td>3</td>
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</tbody>
</table>

Select five of the following:

| POL 3700 | American Presidency         | 3    |
| POL 3701 | American Legislative Process|      |
| POL 3702 | Law and Society             |      |
| POL 3703 | American Constitutional Law |      |
| POL 3704 | American Political Parties and Elections | 3 |
| POL 3714 | American Public Opinion     |      |
| POL 3718 | American Public Policy and Policy Analysis | 3 |
| POL 3722 | State and Local Government  |      |

Total Semester Hours 18

**Minor in Foreign Affairs**

<table>
<thead>
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<th>COURSE</th>
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<tbody>
<tr>
<td>POL 1550</td>
<td>Introduction to Political Science</td>
<td>3</td>
</tr>
<tr>
<td>POL 2640</td>
<td>Contemporary World Governments</td>
<td>3</td>
</tr>
<tr>
<td>or POL 2660</td>
<td>International Relations</td>
<td></td>
</tr>
</tbody>
</table>

International Relations
Select one to three courses from the following: 3-9

| POL 3760 | International Political Economy           |      |
| POL 3761 | United States Foreign Policy              |      |
| POL 3764 | International Organizations               |      |
| POL 3763 | International Law                         |      |
| POL 3768 | International Conflict                    |      |

Comparative Politics
Select one to three courses from the following: 3-9

| POL 3741 | Russia and China: From Revolution to Reform | 3    |
| POL 3742 | Political Development and Political Regimes |      |
| POL 3744 | European Politics                         |      |
| POL 3751 | Latin American Politics                   |      |

Total Semester Hours 18

**Minor in Peace and Conflict Studies**

The university offers a minor in Peace and Conflict Studies with the advice
and approval of the chair of the department in which the student is majoring.
The multidisciplinary minor focuses on the historical, geographical, political,
minor in Peace and Conflict Studies

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<tbody>
<tr>
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<td>International Political Economy</td>
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<tr>
<td>POL 3761</td>
<td>United States Foreign Policy</td>
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<tr>
<td>POL 3763</td>
<td>International Organizations</td>
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<tr>
<td>POL 3768</td>
<td>International Conflict</td>
<td></td>
</tr>
</tbody>
</table>

Comparative Politics
Select two to three courses from the following: 3-9

| POL 3741 | Russia and China: From Revolution to Reform | 3    |
| POL 3742 | Political Development and Political Regimes |      |
| POL 3744 | European Politics                          |      |
| POL 3751 | Latin American Politics                    |      |

Total Semester Hours 18

**Minor in American Politics**

The Minor in American Politics is designed to prepare students for careers
in the non-profit sector, the public sector, pursue a master of public administration, and pursue careers
in the non-profit sector.
Professional training of public servants contributes to the fulfillment of the Mission of Youngstown State University, which states that the "University and public service are seen, not only as interrelated, but also as fundamental to endeavors both within and outside the University."

Because of the required area specialty, a minor is not required for this track.

<table>
<thead>
<tr>
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<td></td>
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<tr>
<td>YSU 1500</td>
<td>Success Seminar</td>
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<td>or SS 1500</td>
<td>Strong Start Success Seminar</td>
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<tr>
<td>or HONR 1500</td>
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<td>Writing 1</td>
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<td>Communication Foundations</td>
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<td>Natural Science</td>
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<td>Social and Personal Awareness</td>
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<tr>
<td></td>
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<td>FNLG 1550</td>
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<td>FNLG 2600</td>
<td>Intermediate Foreign Language</td>
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<td></td>
<td>Major Requirements</td>
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<tr>
<td>POL 1560</td>
<td>American Government</td>
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<tr>
<td>ECON 2610</td>
<td>Principles 1: Microeconomics</td>
<td>3</td>
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<tr>
<td>ECON 2630</td>
<td>Principles 2: Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 3702</td>
<td>Public Finance</td>
<td>3</td>
</tr>
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<td>POL 3718</td>
<td>American Public Policy and Policy Analysis</td>
<td>3</td>
</tr>
<tr>
<td>POL 3720</td>
<td>Public Management</td>
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<td>POL 3722</td>
<td>State and Local Government</td>
<td>3</td>
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<tr>
<td>POL 3724</td>
<td>Public Budgeting</td>
<td>3</td>
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<tr>
<td>POL 4801</td>
<td>Senior Research Seminar</td>
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</tr>
<tr>
<td>ACCT 2602</td>
<td>Financial Accounting</td>
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<td>SOC 3701</td>
<td>Social Statistics</td>
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<tr>
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<tr>
<td>POL 3785</td>
<td>Political Thought 1</td>
<td></td>
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<tr>
<td>POL 3786</td>
<td>Political Thought 2</td>
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<tr>
<td>POL 3787</td>
<td>Political Thought 3</td>
<td></td>
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<tr>
<td>Select one of the following:</td>
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<tr>
<td>MGT 3725</td>
<td>Fundamentals of Management</td>
<td>3</td>
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<tr>
<td>or MGT 3750</td>
<td>Managing Individuals in Organizations</td>
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<tr>
<td>Select 9 additional credits to define an area specialty. See the Coordinator of Politics and International Relations for details.</td>
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<td>MINOR</td>
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<tr>
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### Year 1

#### Fall

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#### Spring

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<tr>
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<td>International Relations</td>
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<td>CMST 1545</td>
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### Year 2

#### Fall

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<tr>
<td>Social and Personal Awareness 15XX/26XX</td>
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<td></td>
</tr>
<tr>
<td>ECON 2610</td>
<td>Principles 1: Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>Natural Science 15XX/26XX</td>
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#### Spring

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<tbody>
<tr>
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<tr>
<td>POL 37XX Domestic or International</td>
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<tr>
<td>ECON 2630</td>
<td>Principles 2: Macroeconomics</td>
<td>3</td>
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<tr>
<td>Natural Science + Lab 15XX/26XX</td>
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<td>Social and Personal Awareness 15XX/26XX</td>
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### Year 3

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<td>POL 3722</td>
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<tr>
<td>POL 3724</td>
<td>Public Management</td>
<td>3</td>
</tr>
<tr>
<td>POL 4801</td>
<td>Senor Research Seminar</td>
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</tr>
<tr>
<td>ACCT 2602</td>
<td>Financial Accounting</td>
<td>3</td>
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<td>SOC 3701</td>
<td>Social Statistics</td>
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</tr>
<tr>
<td>POL 3785</td>
<td>Political Thought 1</td>
<td></td>
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<tr>
<td>MGT 3725</td>
<td>Fundamentals of Management</td>
<td>3</td>
</tr>
<tr>
<td>or MGT 3750</td>
<td>Managing Individuals in Organizations</td>
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<tr>
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#### Spring

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>POL 3718</td>
<td>American Public Policy and Policy Analysis</td>
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<tr>
<td>Social Science 15X</td>
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<td></td>
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<tr>
<td>MGT 3725</td>
<td>Fundamentals of Management</td>
<td>3</td>
</tr>
<tr>
<td>or MGT 3750</td>
<td>Human Behavior in Organization</td>
<td></td>
</tr>
<tr>
<td>SOC 3701</td>
<td>Social Statistics</td>
<td>4</td>
</tr>
<tr>
<td>Elective</td>
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</tr>
<tr>
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### Year 4

#### Fall

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<tbody>
<tr>
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<td>Public Budgeting</td>
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<tr>
<td>POL 4810</td>
<td>Urban Internship Seminar</td>
<td>2-4</td>
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<td>Specialty XXX</td>
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<td>Specialty XXX</td>
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<td>Semester Hours</td>
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<td>14-16</td>
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#### Spring

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
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<tbody>
<tr>
<td>POL 3724</td>
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<tr>
<td>POL 4801</td>
<td>Senior Research Seminar</td>
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<td>Elective</td>
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<td>3</td>
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<td>Elective</td>
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| Total Semester Hours | | 117-119 |
Sociology and Anthropology
Welcome to the programs of Sociology and Anthropology. We are located on the fourth floor of DeBartolo Hall in room 444 and our program phone number is 330-941-3442.

We offer BA degrees in Anthropology and in Sociology. We also minors in seven different areas, including Archaeology, Forensic Anthropology, and others. All of our programs are hands-on, offering students opportunities for internships, fieldwork, and study abroad so that they emerge well-qualified to pursue graduate degrees and rewarding careers.

SOCILOGY
Sociology is the scientific study of society, human social relationships, and social institutions. At the core of sociology is the sociological imagination – a need to make the familiar strange and look beyond what is normally taken-for-granted to more nuanced understandings of social life. Much like society itself, sociological investigations are diverse, covering everything from the analysis of strangers interacting on the street to global social movements. The Sociology Program at YSU gives students a broad education in the field of sociology, emphasizing contemporary issues related to inequality, social institutions, gender and the family, deviance and criminoology, aging, and research. Students learn how to think critically about human social life, seek answers to research questions, and help others understand how society works and how we might improve it. Our students have the opportunity to intern with a number of local and regional organizations, such as the Northeast Ohio Coalition Against Human Trafficking and Compass Community and Family Services.

ANTHROPOLOGY
Anthropology is the cultural and biological study of humankind. It is a discipline that asks such question as, "What makes us human?" "How did we develop biologically and culturally?" "Where did we come from and where are we going?" Through the study of Archaeology, Biological Anthropology, and Cultural Anthropology at YSU, students explore these questions and the ways in which we begin to answer them. Students are broadly trained in the discipline and emerge well-trained to pursue graduate degrees and careers in and related to anthropology. The program offers numerous opportunities to work with materials in the classroom and lab, including osteological and faunal remains and artifacts. Our students participate on faculty-led archaeological class projects in Guatemala, the Bahamas, and in northeast Ohio and have joined anthropological field schools in Belize, Canada, South Africa, Cyprus, and elsewhere.

Professor
Amanda Fehlbaum, Ph.D., Associate Professor
Paul B. Gordiejew, Ph.D., Associate Professor
Qi Jiang, Ph.D., Professor
Loren R. Lease, Ph.D., Associate Professor
Denise A. Narcisse, Ph.D., Associate Professor
Matt O'Mansky, Ph.D., Associate Professor

Majors
- BA in Sociology (p. 243)
- BA in Anthropology (p. 241)

Minors
- Sociology Minor (p. 245)
- Anthropology, General Minor (p. 244)
- Anthropology, Biological Minor (p. 244)
- Anthropology, Cultural Minor (p. 244)
- Anthropology, Forensic Minor (p. 244)
- Archaeology Minor (p. 244)

Anthropology
ANTH 1500 Introduction to Anthropology 3 s.h.
An exploration of what it means to be human from a biological and cultural perspective using archaeology, bioanthropology, and ethnography to trace over four million years of human development.
Gen Ed: Social Science.

ANTH 1503 The Rise and Fall of Civilizations 3 s.h.
Comparative survey of the archaeological evidence on the origins, development, and collapse of the great early civilizations of the world. The transformation of societies from settled villages to urban states in Mesopotamia, Egypt, China, Mexico, and Peru. Analysis of the archaeological discoveries, alternative interpretations, and general theories of cultural evolution.
Gen Ed: Social Science.

ANTH 2600 Human Osteology 4 s.h.
An examination of the anatomy of the skeleton in a defleshed state to gain an understanding of the characteristics and personal biology of individuals and exploration of the range of human variation within and between populations.

ANTH 3701 Social Statistics 4 s.h.
Measurement and interpretation of social data by the use of descriptive techniques. Examines methods of probability theory as a basis for statistical inference, hypothesis testing, correlation, chi-square, and variance analysis. Listed also as SOC 3701.
Prereq.: SOC 1500 or ANTH 1500, successful completion of ENGL 1551 and MATH 1501 or a level 3 or higher on the math placement exam.

ANTH 3702 Archaeology 3 s.h.
An introduction to the methods and subject matter of archaeology in its reconstruction of Paleolithic and prehistoric cultures as inferred from artifacts.
Prereq.: ANTH 1500 or ANTH 1503.

ANTH 3703 Biological Anthropology 4 s.h.
The physical origins and development of the human species as a member of the primate order and the biological bases of human differences disclosed by human paleontology and archaeology.
Prereq.: ANTH 1500.
Cross-listed: BIOL 3704.

ANTH 3704 Primates 3 s.h.
Primate evolution throughout the Cenozoic Era, from primate origins to the advent of hominids. Examines research into the natural behavior of a wide range of primates, focusing on the social organization of terrestrial monkeys and apes.
Prereq.: ANTH 3703.

ANTH 3705 Cultural Anthropology 3 s.h.
A cross-cultural comparison of the cultural norms that regulate society, emphasizing the functional prerequisites for the existence of society and individual demands on society.
Prereq.: ANTH 1500.
Cross-listed: AMER 3705.

ANTH 3750 Religion and Race 3 s.h.
Examines race theory and its relation to religious studies through consideration of immigration patterns and the ways in which religion has been affixed to markers of identity over the last two hundred years.
Prereq.: REL 2601 or SOC 1500 or ANTH 1500.
Cross-listed: REL 3750 and SOC 3750.

ANTH 3760 Cultures of the Old World 3 s.h.
An examination of the ethnography, cultural contributions, and achievements of Old World peoples, which may include the cultures of Europe, Africa, the Middle East, Asia or Australia and Oceania. May be taken up to three times for credit if the topic is different.
Prereq.: ANTH 3705 or 6 s.h. in AFST, including AFST 2601.
ANTH 3760F  Cultures of the Old World Qualitative Methods   3 s.h.
Examination of the ethnography, cultural contributions, and achievements of
Old World peoples, which may include the cultures of Europe, Africa, the Middle
East, Asia or Australia and Oceania. May be taken up to three times for credit if
the topic is different.
Prereq.: ANTH 3705 or 6 s.h. in AFST, including AFST 2601.

ANTH 3760O  Cult Old Wr Cult People China   3 s.h.
An examination of the ethnography, cultural contributions, and achievements of
Old World peoples, which may include the cultures of Europe, Africa, the Middle
East, Asia or Australia and Oceania. May be taken up to three times for credit if
the topic is different.
Prereq.: ANTH 3705 or 6 s.h. in AFST, including AFST 2601.

ANTH 3761  Cultures of the New World   3 s.h.
An examination of various topics in New World cultures. Topics vary by
semester and may include native South Americans, native North Americans,
Native Americans' civil rights, the reservation system, and others. May be
taken up to three times for credit if the topic is different.
Prereq.: ANTH 1500.

ANTH 3761E  Cultures of the New World Society, Wellness and Culture   3 s.h.
An examination of various topics in New World cultures. Topics vary by
semester and may include native South Americans, native North Americans,
Native Americans' civil rights, the reservation system, and others. May be
taken up to three times for credit if the topic is different.
Prereq.: ANTH 1500.

ANTH 3762  The Power and Meaning of Food   3 s.h.
Explores the relationship between culture and food in its material and symbolic
forms. Examines the patterns of production, distribution, exchange, and
consumption of food across time and within particular cultural and global
contexts. Topics include the place of food in ritual, gift-giving, maintaining
identities, and culture change.
Prereq.: ANTH 3705.

ANTH 3775  Native North Americans   3 s.h.
Detailed discussion of the culture and achievements of the tribal peoples
native to North America.
Prereq.: ANTH 1500.

ANTH 3777  Bahamian Archaeology   3 s.h.
Examines the prehistory and ecology of the Bahamas and entails
archaeological surveys and excavation of sites. May be repeated once.
Prereq.: ANTH 3702 or permission of the instructor.

ANTH 3778  Archaeological Techniques   1-9 s.h.
Practice in archaeological field methods, including surveying, mapping,
excavation, and artifact analysis. Amount of field work and lab analysis can
vary from four weeks to one semester. Credit hours may vary accordingly from
1 to 9 hours with approval of the instructor and department chair.
Prereq.: ANTH 3702 or permission of the chair.

ANTH 3779  Fieldwork in Historical and Industrial Sites Archaeology   3 s.h.
Excavation of New World sites after 1492, culminating in the physical
examination of the remains of historical, industrial, and post-industrial sites.
Techniques for literature search and fieldwork. May be repeated once with
different site or theoretical focus.
Prereq.: ANTH 3702 or permission of chair.

ANTH 3780  Forensic Anthropology   1 4 s.h.
Forensics from the perspective of anthropology, especially through hands-on
study of human remains. Methods of determining the sex, age, ancestry, and
stature of an individual. Field methods for forensic anthropology and trauma
analysis. 4 s.h.
Prereq.: ANTH 2600 or BIOL 3705.

ANTH 3790  Aging in Cross-Cultural Perspective   3 s.h.
Examines the phenomenon of aging from cross-cultural perspectives with
an emphasis on cultural evolution and its impact upon the status, roles and
cultural values associated with aging and the aged. Listed also as SOC 3790
and GERO 3790.
Prereq.: ANTH 1500 or SOC 1500, or GERO 1501.

ANTH 4800  Undergraduate Research   1-2 s.h.
Research participation under the direction and guidance of a full-time faculty
member. Designed to acquaint the advanced student with special research
problems associated with various aspects of the discipline. May be repeated
to a maximum of 4 s.h.
Prereq.: Permission of chairperson and junior standing.

ANTH 4801  Anthropological Thought   3 s.h.
Analysis of the theories and methodology of the major contributors to
temporary anthropological thought, such as the evolutionist, diffusionist,
functional, and multilinear schools.
Prereq.: ANTH 3705.

ANTH 4815  Anthropology of Religion   3 s.h.
A survey of anthropological approaches to the study of religion, illustrated by
a critical consideration of past and present contributions to the field. Study of
selected religious systems, areally and topically.
Prereq.: ANTH 3705 or 6 s.h. in REL including REL 2601.

ANTH 4824  Old World Prehistory: Topics   3 s.h.
Examination of the prehistoric development of Old World (Africa, Europe, Far
East, Middle East, and Oceanic cultures). May be taken twice for credit if topic
is different.
Prereq.: ANTH 3702.

ANTH 4825  New World Archaeology: Topics   3 s.h.
Examination of the archaeological evidence of the development of New World
cultures from early prehistoric to late post-industrial times. Topics vary by
semester and may include historical archaeology, North American prehistory,
Ohio prehistory, Maya, Aztec and Inca, South American prehistory, and others.
May be taken up to three times for credit if the topic is different. Some topics
may include field work.
Prereq.: ANTH 3702.

ANTH 4825C  New World Archaeology: Topics International Study
Guatemala   3 s.h.
Examination of the archaeological evidence of the development of New World
cultures from early prehistoric to late post-industrial times. Topics vary by
semester and may include historical archaeology, North American prehistory,
Ohio prehistory, Maya, Aztec and Inca, South American prehistory, and others.
May be taken up to three times for credit if the topic is different. Some topics
may include field work.
Prereq.: ANTH 3702.

ANTH 4825D  New World Archaeology Topics Peopling New World   3 s.h.
Examination of the archaeological evidence of the development of New World
cultures from early prehistoric to late post-industrial times. Topics vary by
semester and may include historical archaeology, North American prehistory,
Ohio prehistory, Maya, Aztec and Inca, South American prehistory, and others.
May be taken up to three times for credit if the topic is different. Some topics
may include field work.
Prereq.: ANTH 3702.

ANTH 4850  Research Methods   3 s.h.
An introduction to methods employed in social research. Attention is given to
(1) the logic of sociological inquiry and the relationship between theory and
methods; (2) the various qualitative and quantitative methods; (3) research
design, data collection, organization, analysis, interpretation and application;
(4) the social, cultural, political, and ethical context of social research; and
(5) computer skills employed in data analysis. Listed also as SOC 4850 or
GERO 4850.
Prereq.: SOC 3701 or ANTH 3701.

ANTH 4859  Senior Thesis   1 1 s.h.
Design and completion of a quantitative or qualitative research proposal for
the Senior Capstone in Anthropology.
Prereq.: Senior status in ANTH; ANTH 3701 and ANTH 4801, concurrent with
ANTH 4850.
**Gerontology**

**GERO 3703**  
**Aging and Society**  3 s.h.  
An interdisciplinary introduction to studies in aging. Examines the impact of population aging and its effect on society at large. Also examines individual aging processes and social significance of aging. Listed also as SOC 3703.  
Prereq.: SOC 1500 or GERO 1501.  

**GERO 3703H**  
**Honors Aging and Society**  3 s.h.  
An interdisciplinary introduction to studies in aging. Examines the impact of population aging and its effect on society at large. Also examines individual aging processes and social significance of aging. Listed also as SOC 3703.  
Prereq.: SOC 1500 or GERO 1501.  

**GERO 3745**  
**Sociology of Health, Illness, and Healthcare**  3 s.h.  
Social attitudes toward illness. Cultural and social factors in disease definition of illness, and organization of the health professions and health facilities. Listed also as SOC 3745.  
Prereq.: SOC 1500, GERO 1501, or admission to NEOMED-YSU program.  

**GERO 3755**  
**Theories of Gerontology**  3 s.h.  
Review and critical analysis of current theories of the social aspects of aging and their use in research. Listed also as SOC 3755.  
Prereq.: SOC 1500 or GERO 1501.

**GERO 3756**  
**Aging and Ethnicity**  3 s.h.  
Aging in American subcultures, noting differences in status/role systems, demographic distributions, life styles, methods of dealing with the elderly, and related problems. Listed also as SOC 3756.  
Prereq.: SOC 1500 or GERO 1501.

**GERO 3757**  
**Aging and Social Policy**  3 s.h.  
Critical examination of social policies and social systems which affect aging and retirement. Listed also as SOC 3757 and POL 3757.  
Prereq.: SOC 1500, GERO 1501, or POL 1560.

**GERO 3758**  
**Long-Term Care**  3 s.h.  
Examines critical issues in long-term care systems, services, and programs. Impacts of social demographic and economic changes on long-term care needs, demands, and supplies. Contemporary trends and future outlooks of long-term care. Listed also as SOC 3758.  
Prereq.: SOC 1500 or GERO 1501.

**GERO 3759**  
**Physical Change and Aging**  3 s.h.  
Designed to provide knowledge about physical aspects of human aging and factors that affect physical aging. Students learn about physical changes that occur naturally with advancing age and changes associated with disease or disability (abnormal changes). Behavioral and inherent factors that influence physical aging are discussed with the goal to increase awareness of prevention strategies.  
Prereq.: GERO 1501 or SOC 1500.

**GERO 3761**  
**Elder Crimes - Elder Justice**  3 s.h.  
Issues in gerontology and aging that affect law enforcement and the criminal justice system.  
Prereq.: GERO 1501 or SOC 1500 or CJFS 1500.  
Cross-listed: CJFS 3761 and SOC 3761.

**GERO 3790**  
**Aging in Cross-Cultural Perspective**  3 s.h.  
Examines the phenomenon of aging from cross-cultural perspectives with an emphasis on cultural evolution and its impact upon the status, roles and cultural values associated with aging and the aged. Listed also as SOC 3790 and ANTH 3790.  
Prereq.: GERO 1501 or ANTH 1500, or SOC 1500.

**GERO 4804**  
**Family, Health, and Aging**  3 s.h.  
Examines family and health related aspects of aging. Positive and negative interactions among family members and caregivers, and their impact on mental and physical quality of life of the elderly. Listed also as SOC 4804.  
Prereq.: GERO 3703 or SOC 3703.

**GERO 4821**  
**Internship in Gerontology**  3-15 s.h.  
Application of gerontological knowledge in settings such as social agencies, government offices, hospitals, nursing homes, or industry. May be repeated up to 15 s.h., but only a maximum of 6 semester hours can be applied to the gerontology major.  
Prereq.: Junior standing, 9 s.h. of Gerontology, and permission of chairperson.

**GERO 4850**  
**Research Methods**  3 s.h.  
An introduction to methods employed in social research. Attention is given to (1) the logic of scientific inquiry and the relationship between theory and methods; (2) the various qualitative and quantitative methods; (3) research design, data collection, organization, analysis, interpretation and application; (4) the social, cultural, political, and ethical context of social research; and (5) computer skills employed in data analysis. Listed also as ANTH 4850 or SOC 4850.  
Prereq.: SOC 3701, ANTH 3701.
GERO 4851 Capstone in Gerontology 3 s.h.
A capstone experience for the interdisciplinary study of aging. Students will complete a major research project.
Prereq.: Senior status in Gerontology and GERO 4850.
Gen Ed: Capstone.

GERO 4860 Senior Thesis 3 s.h.
A capstone experience for the major in gerontology. Designing, implementing, and completing an empirical research project and paper on a topic approved by the thesis advisor.
Prereq.: Senior status in GERO; GERO 4850 or SOC 4850.
Cross-listed: SOC 4860.

GERO 6906 Perspectives in Gerontology 3 s.h.
Focus on the major theoretical perspectives of aging and aging related research with a focus on health. Theories from gerontology, epidemiology, sociology, and psychology will be covered.

GERO 6915 Service Delivery Aging Policy 3 s.h.
An interdisciplinary analysis of services for older adults including an examination of major policies, programs, and trends in aging.

GERO 6960 Epidemiology of Aging 3 s.h.
Integration and application of epidemiologic theories; major conceptual issues regarding epidemiology and aging; and contemporary interdisciplinary concepts and research. Primary focus will be on the disease distribution and leading causes of death among our aging population.

GERO 6998 Anatomy and Physiology of Aging 3 s.h.
Using a systems approach, this course will examine the anatomical and physiological changes that occur with aging. It will discuss age-related disorders and evaluate the impact of these changes on activities and daily function.

GERO 6999 Research Methods 3 s.h.
This course serves as an introduction to major methodological issues and basic statistics in the social-scientific study of gerontology. Major topics include developmental perspective and conceptualization of change, basic developmental research design, conceptualization of research problems, research design, measurement, and data analysis. This course should enable students to formulate research questions, design studies, and determine measurement devices and methods of analysis from a developmental perspective.

GERO 7001 Long-Term Care 3 s.h.
This course will introduce students to the following topics: who needs long term care; population distribution of long-term care and its current trends; long-term care industry; human medicine and long-term care; social structures and social inequalities in long-term care; culture components of long-term care; family care and social care; government, laws, and social policies of long-term care; and long-term care in a global perspective.
Prereq.: GERO 6960.

GERO 7090 Field Practicum 1-9 s.h.
Students will complete a 200-hour placement in an aging-related workplace. Variable credit 1-6 s.h. May be repeated for up to 9 s.h.

GERO 7094 Selected Topics 3 s.h.
An examination of contemporary topics in the field of gerontology. Examples of subject areas that may be covered: Nutrition, Pharmacology, Legal, etc. Variable credit 1-3 hours may be repeated for up to 6 credit hours.

GERO 7094I Selected Topics Gerontology Falls 1-3 s.h.
An examination of contemporary topics in the field of gerontology. Examples of subject areas that may be covered: Nutrition, Pharmacology, Legal, etc. Variable credit 1-3 hours may be repeated for up to 6 credit hours.

GERO 7099 Thesis 1-3 s.h.
A substantive research project with approval of a committee chair and committee. Variable credit 1-3 s.h. May be repeated for up to 6 s.h.

Sociology

SOC 1500 Introduction to Sociology 3 s.h.
An introduction to the science of human societies and groups: analysis of the structures, functions, and processes that bring about changes in societies, groups, communities, classes, and institutions.
Gen Ed: Social Science.

SOC 2601 Social Problems 3 s.h.
A sociological overview of various contemporary social issues, analyzing significant discrepancies between standards of expectation and actual social behavior; attempting to ascertain possible causes, and discussing trends and possible changes.
Gen Ed: Social Science.

SOC 2630 Criminology 3 s.h.
Study of the social context of crime in America. Review of historical theories offered in explanation of criminal behavior.

SOC 2640 Gender in Society 3 s.h.
Sociological analysis of gender role issues by major institutions of society, including political, educational, economic and legal systems as well as media and the family. Focus is on effects of stratification, culture, gender norms, and the socialization process.

SOC 2650 Identities and Differences 3 s.h.
A study of personal and social issues that shape the understanding and development of identity and diversity.
Gen Ed: Domestic Diversity, Social and Personal Awareness.

SOC 3700 Minority Groups 3 s.h.
Survey of the origins and characteristics of ethnic and racial minority groups, with emphasis on the significance of membership in such a group for in-group, out-group, and community solidarity.
Prereq.: SOC 1500.
Cross-listed: AMER 3700.

SOC 3701 Social Statistics 4 s.h.
Measurement and interpretation of social data by use of descriptive techniques. Examines methods of probability theory as a basis for statistical inference, hypothesis testing, correlation, chi-square, and variance analysis. Listed also as ANTH 3701.
Prereq.: SOC 1500 or ANTH 1500, successful completion of ENGL 1551 and MATH 1501 or a level 3 or higher on the math placement exam.

SOC 3703 Aging and Society 3 s.h.
An interdisciplinary introduction to studies in aging. Examines the impact of population aging and its effect on the society at large. Also examines individual aging processes and social significance of aging. Listed also as GERO 3703.
Prereq.: SOC 1500 or GERO 1501.

SOC 3703H Honors Aging and Society 3 s.h.
An interdisciplinary introduction to studies in aging. Examines the impact of population aging and its effect on the society at large. Also examines individual aging processes and social significance of aging. Listed also as GERO 3703.
Prereq.: SOC 1500 or GERO 1501.

SOC 3705 The Family 3 s.h.
Family and kinship systems as major institutions; their development, functions, and relation to other basic institutions found in different cultures and social strata.
Prereq.: SOC 1500 or ANTH 1500.

SOC 3707 Urban Sociology 3 s.h.
A comparative study of cities of pre-industrial and industrial societies, historical and contemporary. The process of urbanization and changing urban structure and functions.
Prereq.: SOC 1500.
SOC 3708 Political Sociology 3 s.h.
The social conditions that affect government and politics and that may help to
determine political order and regulate struggles for power; associations and
movements leading to stability or change.
Prereq.: SOC 1500.

SOC 3720 Applied Sociology 3 s.h.
Uses of sociology in practical affairs, providing theory and data for public
policy; institutional reform, social action programs, and social inventions.
Contributions to architectural design, industrial engineering, community
planning, and innovative legislation.
Prereq.: SOC 1500.
Cross-listed: AMER 3720.

SOC 3731 Social Deviance 3 s.h.
Focuses on problems of drug abuse, sexual deviation, crime, and other forms
of deviance. Theoretical approaches to deviant behavior; etiologies and
methods of social control are explored.
Prereq.: SOC 1500 or CJFS 1500.

SOC 3733 White Collar Crime 3 s.h.
Focuses on distinguishing between various types of white collar crime, such as
corporate fraud, corruption of public officials, and environmental crime.
Also examines theoretical explanations for white collar crime and situates it
within larger social contexts of power and status.
Prereq.: SOC 1500 or CJFS 1500.

SOC 3735 Juvenile Delinquency 3 s.h.
Social and psychological factors underlying delinquency; the juvenile court
and probation; treatment and preventive measures.
Prereq.: SOC 1500 or CJFS 1500.

SOC 3736 Crime and the Life Course 3 s.h.
Examines the development, stability, and change of criminal behavior
throughout different stages of the life course. Themes such as criminal
trajectories, transitions, and turning points are discussed.
Prereq.: SOC 1500 or CJFS 1500.

SOC 3740 Complex Organizations 3 s.h.
Structures and processes of large-scale organizations: leadership, control
techniques, tensions, bureaucratic pathologies, organizational change.
Prereq.: SOC 1500.

SOC 3741 Social Movements 3 s.h.
Analysis of the role of social movements, intellectual criticism, and
socioeconomic trends; study of the dynamics of change initiated outside of
regular and institutionalized channels, including mobs and crowds.
Prereq.: SOC 1500.

SOC 3742 Small Group Processes 3 s.h.
A study of small group behavior; influence, attitudes, and values of social
microsystems.
Prereq.: SOC 1500.

SOC 3743 Social Stratification and Inequality 3 s.h.
Comparative analysis of social stratification systems with major emphasis on
modern Western societies.
Prereq.: SOC 1500.

SOC 3744 Social Deviance 3 s.h.
Problems of drug abuse, sexual deviation, crime, and other forms of deviance.
Theoretical approaches to deviant behavior; etiologies and methods of social
control.
Prereq.: SOC 1500.

SOC 3745 Sociology of Health, Illness, and Healthcare 3 s.h.
Social attitudes toward illness. Cultural and social factors in disease definition
of illness, and organization of the health professions and health facilities.
Listed also as GERO 3745.
Prereq.: SOC 1500, GERO 1501, or admission to NEOMED-YSU program.

SOC 3746 Sociology of the Body 3 s.h.
This course examines the body and its relationship to the self as a product
of complex social arrangements and processes. The body is studied as an
object of social control and as the focus of shifting race, gender, and sexual
categories. Topics include health, medicine, consumerism, sports, and popular
culture.
Prereq.: SOC 1500.

SOC 3747 Sociology of Sexuality 3 s.h.
Examines sexuality and how it is perceived, defined, and experienced in the
context of society. Sexuality is studied as subject to social norms, attitudes,
and beliefs through public and private policies, practices, and institutions.
Explores how the social construction of sexuality influences both sexual and
non-sexual relationships.
Prereq.: 3 semester hours in Sociology.
Cross-listed: WMST 3747.

SOC 3749 Sociological Theory 3 s.h.
The major theoretical traditions in Sociology emerging from the enlightenment
period and evolving to the present.
Prereq.: SOC 1500 or ANTH 2602.

SOC 3750 Religion and Race 3 s.h.
Examines race theory and its relation to religious studies through
consideration of immigration patterns and the ways in which religion has been
affixed to markers of identity over the last two hundred years.
Prereq.: REL 2601 or SOC 1500 or ANTH 1500.
Cross-listed: REL 3750 and ANTH 3750.

SOC 3752 Evaluation Research 3 s.h.
Introduction to the field of evaluation research of social policy and programs.
Current procedures, concepts, and techniques. Social and ethical issues of
research.
Prereq.: SOC 3701.

SOC 3755 Theories of Gerontology 3 s.h.
Review and critical analysis of current theories of the social aspects of aging,
and their use in research. Listed also as GERO 3755.
Prereq.: SOC 1500 or GERO 1501.

SOC 3756 Aging and Ethnicity 3 s.h.
Aging in American subcultures, noting differences in status/role systems,
demographic distributions, life styles, methods of dealing with the elderly, and
related problems. Listed also as GERO 3756.
Prereq.: SOC 1500 or GERO 1501.

SOC 3757 Aging and Social Policy 3 s.h.
Critical examination of social policies and social systems which affect aging
and retirement. Listed also as GERO 3757 and POL 3757.
Prereq.: SOC 1500, GERO 1501, or POL 1560.

SOC 3758 Long-Term Care 3 s.h.
Examines critical issues in long-term care systems, services, and programs.
Impacts of social demographic and economic changes on long-term care
needs, demands, and supplies. Contemporary trends and future outlooks of
long-term care. Listed also as GERO 3758.
Prereq.: SOC 1500 or GERO 1501.

SOC 3759 Sociology of Dementia 3 s.h.
The understanding of the nature, causes, symptoms, and social consequences
of dementia. Attention to the status of aging, and to the status of those who
suffer from dementia in contemporary society.
Prereq.: SOC 1500.

SOC 3760 Sociology of Death and Dying 3 s.h.
Analysis of the social aspects of human death, dying, and bereavement using
various sociological approaches. Explores data from secondary sources,
surveys, and field investigations that relate to the institutional contexts of
dying and grieving processes. Includes practical application of sociological
analysis of dying and death.
Prereq.: SOC 1500.
SOC 3790 Technology and Society 3 s.h.
A critical exploration of how societal needs affect the creation of technologies and how technology affects society. An interdisciplinary approach in examining the complex interactions between humans and their tools.
Prereq.: BIOL 2601 or ENGR 1550 or SOC 1500, and junior standing.

SOC 3790 Aging in Cross-Cultural Perspectives 3 s.h.
Examines the phenomenon of aging from cross-cultural perspectives with an emphasis on cultural evolution and its impact upon the status, roles, and cultural values associated with aging and the aged. Listed also as ANTH 3790 and GERO 3790.
Prereq.: SOC 1500 or ANTH 1500 or GERO 1501.

SOC 3798 Select Topics in Sociology 3 s.h.
In-depth examination of various sociological topics and issues of both current and long-standing interest. May be taken twice with different topics.
Prereq.: 3 s.h. in Sociology.

SOC 3798 ST Culture and People of China 3 s.h.
In-depth examination of various sociological topics and issues of both current and long-standing interest. May be taken twice with different topics.
Prereq.: 3 s.h. in Sociology.

SOC 4800 Undergraduate Research 1-2 s.h.
Research participation under the direction of a faculty member. Designed to acquaint the advanced student with special research problems associated with various aspects of the discipline. May be repeated for a maximum of 4 s.h.
Prereq.: Permission of chairperson and 20 s.h. in Sociology.

SOC 4801 Later Life Issues 3 s.h.
An examination of contemporary issues and concerns among the elderly. Topics include family relations, finances, entitlements, Social Security, quality of life, and euthanasia.
Prereq.: SOC 3703.

SOC 4804 Family, Health, and Aging 3 s.h.
Examines family and health related aspects of aging. Positive and negative interactions among family members and caregivers, and their impact on mental and physical quality of life of the elderly. Listed also as GERO 4804.
Prereq.: SOC 3703 or GERO 3703.

SOC 4810 International Study in Sociology 3 s.h.
Sociological study of a selected international area. Travel to the area of study under the supervision of a Sociology faculty member. The course grade is based on participation in the trip and a term paper or comparable assignments. May be repeated once. Permission of the chairperson.

SOC 4821 Internship in Sociology 3-9 s.h.
Application of sociological knowledge in settings such as social agencies, government offices, hospitals, nursing homes, correctional facilities, and industry. Maximum of 6 s.h. may be applied to the Sociology major.
Prereq.: Junior standing and at least 9 s.h. of Sociology, and permission of chairperson.

SOC 4850 Research Methods 3 s.h.
An introduction to methods employed in social research. Attention is given to (1) the logic of scientific inquiry and the relationship between theory and methods; (2) the various qualitative and quantitative methods; (3) research design, data collection, organization, analysis, interpretation and application; (4) the social, cultural, political, and ethical context of social research; and (5) computer skills employed in data analysis. Listed also as ANTH 4850 or GERO 4850. Prereq.: SOC 3701, ANTH 3701.

SOC 4859 Senior Thesis 1 1 s.h.
Design and completion of a quantitative or qualitative research proposal for the Senior Capstone in Sociology.
Prereq.: Senior status in SOC; SOC 3701 and SOC 3749, concurrent with SOC 4850.

SOC 4860 Senior Thesis 2 3 s.h.
A capstone experience for the major in sociology. Implementing and completing a quantitative or qualitative research project and paper on the proposal approved by the thesis advisor during Senior Thesis 1.
Prereq.: Senior status in Sociology, SOC 4850 and SOC 4859.

SOC 4898 Selected Problems in Sociology and Anthropology 1-3 s.h.
Readings in sociology and anthropology dealing with current problems in theory and methods. Credit is given according to the nature and extent of the problems and the readings. For students planning to enter graduate school.
Prereq.: Departmental major in senior year.

SOC 6900 Special Sociological Problems 3 s.h.
Advanced seminars focusing on independent study at the graduate level; social organization in a changing world; social disorganization (or deviance) and social controls; and sociocultural factors in personality development; minority relationships; sociology of law; social change; and comparative institutions.

SOC 6905 Social Gerontology 3 s.h.
Integration and application of gerontological theories; major conceptual issues regarding life span development; and contemporary gerontological concepts and research.

Bachelor of Arts in Anthropology
A major in anthropology can take several directions. As the study of humankind, a background in anthropology can be immediately useful in many careers such as business, government, law, elementary and secondary education, urban affairs, administration, and industry (http://www.americananthro.org/AdvanceYourCareer/Content.aspx?ItemNumber=1783). Others can use the bachelor’s degree as a first step in acquiring an advanced degree and ultimately teaching and doing research at the college or university level.

Internships and Fieldwork in Anthropology
Internships are uncommon in Anthropology. However, fieldwork and other hands-on opportunities are available to all Anthropology majors. Anthropology majors may have the opportunity to apply their knowledge during an internship at the Mahoning County Coroner’s Office or through fieldwork and laboratory analyses locally, in Guatemala, in the Bahamas, and elsewhere.

To earn the BA degree the student must satisfy all the degree requirements in the College of Liberal Arts and Social Sciences and take 40 semester hours of courses from the Anthropology curriculum. Required courses are:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>YSU 1500</td>
<td>Success Seminar</td>
<td>1-2</td>
</tr>
<tr>
<td>or SS 1500</td>
<td>Strong Start Success Seminar</td>
<td></td>
</tr>
<tr>
<td>or HONR 1500</td>
<td>Intro to Honors</td>
<td></td>
</tr>
</tbody>
</table>

General Education Requirements

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 1550</td>
<td>Writing 1</td>
<td>3-4</td>
</tr>
<tr>
<td>or ENGL 1549</td>
<td>Writing 1 with Support</td>
<td></td>
</tr>
<tr>
<td>ENGL 1551</td>
<td>Writing 2</td>
<td>3</td>
</tr>
<tr>
<td>CMST 1545</td>
<td>Communication Foundations</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics Requirement</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Arts and Humanities (6 s.h.)</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Natural Sciences (2 courses, 1 with lab) (6-7 s.h.)</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Social Science (6 s.h.)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3 s.h. satisfied by ANTH 1500 (required for the major)
Bachelor of Arts in Anthropology

Social Science elective 3
Social and Personal Awareness (6 s.h.) 6

Foreign Language Requirement
FNLG 1550 Elementary Foreign Language 4
FNLG 2600 Intermediate Foreign Language 4

Major Requirements
ANTH 1500 Introduction to Anthropology 3
ANTH 3701 Social Statistics 4
ANTH 3702 Archaeology 3
ANTH 3703 Biological Anthropology 4
ANTH 3705 Cultural Anthropology 3
ANTH 4801 Anthropolological Thought 3
ANTH 4850 Research Methods 3
ANTH 4860 Senior Thesis 2 3

Select one area course from each of the three subfields. 9
Select two upper-division anthropology electives. 6

Minor 18
Electives Must complete a minimum number of electives to meet the 120sh total 18

Total Semester Hours 120-122

Students are responsible for satisfying all prerequisites and maintaining a "C" or better in all major and minor requirements and cannot take courses on a "CR/NC" basis.

Students wishing to minor in anthropology must complete 18 s.h. in an approved designated minor. Students are responsible for satisfying all prerequisites and maintaining "C" or better in all minor requirements and cannot take courses on a "CR/NC" basis.

Minors in anthropology offered from the department are as follows:

- General Anthropology (http://catalog.ysu.edu/undergraduate/colleges-programs/college-liberal-arts-social-sciences/department-sociology-anthropology-gerontology/anthropology-general-minor/)
- Archaeology (http://catalog.ysu.edu/undergraduate/colleges-programs/college-liberal-arts-social-sciences/department-sociology-anthropology-gerontology/archaeology-minor/)
- Biological Anthropology (http://catalog.ysu.edu/undergraduate/colleges-programs/college-liberal-arts-social-sciences/department-sociology-anthropology-gerontology/biological-minor/)
- Cultural Anthropology (http://catalog.ysu.edu/undergraduate/colleges-programs/college-liberal-arts-social-sciences/department-sociology-anthropology-gerontology/cultural-minor/)
- Forensic Anthropology (http://catalog.ysu.edu/undergraduate/colleges-programs/college-liberal-arts-social-sciences/department-sociology-anthropology-gerontology/anthropology-forensic-minor/)

See Minors for course requirements.

*Please see your advisor in order to ensure that you are on track to graduate.

*For General Education electives, be sure that you take two courses from each knowledge domain, including a science lab:


Year 1
Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>YSU 1500</td>
<td>Success Seminar</td>
</tr>
<tr>
<td>ANTH 1500</td>
<td>Introduction to Anthropology (This course fulfills a GER SS requirement)</td>
</tr>
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</table>

Year 2
Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>S.H.</th>
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<tbody>
<tr>
<td>ANTH 3702</td>
<td>Archaeology</td>
</tr>
<tr>
<td>ANTH 3703</td>
<td>Biological Anthropology</td>
</tr>
<tr>
<td>General education elective course</td>
<td>3</td>
</tr>
<tr>
<td>General education elective course</td>
<td>3</td>
</tr>
<tr>
<td>General education Natural Science w/lab</td>
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</table>

Spring

<table>
<thead>
<tr>
<th>Course</th>
<th>S.H.</th>
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</thead>
<tbody>
<tr>
<td>ANTH 3705</td>
<td>Cultural Anthropology</td>
</tr>
<tr>
<td>ENGL 1551</td>
<td>Writing 2</td>
</tr>
<tr>
<td>CMST 1545</td>
<td>Communication Foundations</td>
</tr>
<tr>
<td>FNLG 2600</td>
<td>Intermediate Foreign Language</td>
</tr>
<tr>
<td>General education elective course</td>
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</table>

Year 3
Fall

<table>
<thead>
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<th>S.H.</th>
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</thead>
<tbody>
<tr>
<td>ANTH 3701</td>
<td>Social Statistics</td>
</tr>
<tr>
<td>ANTH 37XX+ Archaeology Elective</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 37XX+ Cultural Anthropology elective</td>
<td>3</td>
</tr>
<tr>
<td>Course in Minor</td>
<td>3</td>
</tr>
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</table>

Spring

<table>
<thead>
<tr>
<th>Course</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 4801</td>
<td>Anthropolological Thought</td>
</tr>
<tr>
<td>ANTH 37XX+ Anthropology elective</td>
<td>3</td>
</tr>
<tr>
<td>37xx+ Course in Minor</td>
<td>3</td>
</tr>
<tr>
<td>37xx+ Course in Minor</td>
<td>3</td>
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<tr>
<td>Elective course</td>
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Year 4
Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>S.H.</th>
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</thead>
<tbody>
<tr>
<td>ANTH 4850</td>
<td>Research Methods</td>
</tr>
<tr>
<td>ANTH 37XX+ Anthropology Elective</td>
<td>3</td>
</tr>
<tr>
<td>37xx+ Course in Minor</td>
<td>3</td>
</tr>
<tr>
<td>Elective course</td>
<td>3</td>
</tr>
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</table>

Spring

<table>
<thead>
<tr>
<th>Course</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 4850</td>
<td>Senior Thesis 2</td>
</tr>
<tr>
<td>ANTH 4800</td>
<td>Undergraduate Research</td>
</tr>
<tr>
<td>37xx+ Course in Minor</td>
<td>3</td>
</tr>
<tr>
<td>37xx+ Upper division elective course</td>
<td>3</td>
</tr>
</tbody>
</table>
Bachelor of Arts in Sociology

A major in sociology is for advanced graduate/professional study of sociology, law, counseling, social work, criminal justice, urban development, education, and other fields requiring work beyond the bachelor’s level. A major in sociology also prepares students for employment in:

- government agencies
- businesses
- hospitals
- education
- urban affairs
- personnel

To earn the BA degree, the student must satisfy all the degree requirements in the College of Liberal Arts and Social Sciences and take 31 semester hours of courses from the sociology curriculum. Required courses are:

**FIELD OF STUDY REQUIREMENTS**

**Total Semester Hours** 119-120

<table>
<thead>
<tr>
<th>Elective course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

1. Placement test in English, math, and foreign languages required before registration for classes.

**LEARNING OUTCOMES**

The department’s learning outcomes for anthropology majors are as follows:

- Students can demonstrate comprehension of the fundamental principles and concepts of the four field holistic approach to anthropology.
- Students can evaluate anthropological theories and guiding ethics.
- Students can evaluate the scientific process and research methods. Students can evaluate the importance of past or present cultures, cultural variation, and cultural change in the global context.
- Students can analyze evolutionary biology using mechanism of evolutionary change.

**Bachelor of Arts in Sociology**

**Major Requirements**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>FNLG 1500</td>
<td>Success Seminar</td>
</tr>
<tr>
<td>or SS 1500</td>
<td>Strong Start Success Seminar</td>
</tr>
<tr>
<td>or HONR 1500</td>
<td>Intro to Honors</td>
</tr>
</tbody>
</table>

**General Education Requirements**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 1550</td>
<td>Writing 1</td>
<td>3-4</td>
</tr>
<tr>
<td>or ENGL 1549</td>
<td>Writing 1 with Support</td>
<td></td>
</tr>
<tr>
<td>ENGL 1551</td>
<td>Writing 2</td>
<td>3</td>
</tr>
<tr>
<td>CMST 1545</td>
<td>Communication Foundations</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics Requirement</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Arts and Humanities</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Natural Sciences (one course must include a lab)</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Social Science</td>
<td>6</td>
<td></td>
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<tr>
<td>Social and Personal Awareness</td>
<td>6</td>
<td></td>
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</table>

**Foreign Language Requirement**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
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</thead>
<tbody>
<tr>
<td>FNLG 1505</td>
<td>Elementary Foreign Language</td>
<td>4</td>
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<tr>
<td>FNLG 1506</td>
<td>Intermediate Foreign Language</td>
<td>4</td>
</tr>
</tbody>
</table>

**Sociology Electives**

Select one Sociology course from each Sociology domain

| Domain 1: Social Inequality | SOC 2640, 2690, 3700, 3743, 3798 (Topic: Race, Gender, Social Class, and Crime), or 3798 (Topic: Culture and People of China) |
| Domain 2: Social Institutions | SOC 3705, 3707, 3708, 3740, 3741, or 3745 |
| Domain 3: Gender and the Family | SOC 2601, 3705, 3746, 3798 (Topic: Gender and Work), or 3798 (Topic: Sociology of Sexuality) |
| Domain 4: Deviance and Criminology | SOC 2601, 3701, 3733, 3735, 3736, or 3798 (Topic: Race, Gender, Social Class, and Crime) |
| Domain 5: Aging | SOC 3715, 3757, 3760, 3761, or 4801 |

**Total Semester Hours** 120-122

Students are responsible for satisfying all prerequisites and maintaining a "C" or better in all major and minor requirements and cannot take courses on a "CR/NC" basis.

Students wishing to minor in sociology must complete 18 s.h. by selecting courses from appropriate categories. Students are responsible for satisfying all prerequisites and maintaining a "C" or better in all minor requirements and cannot take courses on a "CR/NC" basis.

*Please see your advisor in order to ensure that you are on track to graduate.

*For General Education electives, be sure that you take two courses from each knowledge domain, including a science lab:

For more information, consult General Education Courses by Knowledge Domain (http://cms.ysu.edu/general-education/general-education-courses-knowledge-domain/).

**Year 1**

**Fall**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
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<tbody>
<tr>
<td>YSU 1500</td>
<td>Success Seminar</td>
<td>1</td>
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<tr>
<td>ENGL 1550</td>
<td>Writing 1</td>
<td>3</td>
</tr>
<tr>
<td>MATH 2623</td>
<td>Quantitative Reasoning</td>
<td>3</td>
</tr>
<tr>
<td>FNLG 1550</td>
<td>Elementary Foreign Language</td>
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</tr>
<tr>
<td>SOC 1500</td>
<td>Introduction to Sociology</td>
<td>3</td>
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</table>

**Semester Hours** 14

**Spring**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 1551</td>
<td>Writing 2</td>
<td>3</td>
</tr>
<tr>
<td>CMST 1545</td>
<td>Communication Foundations</td>
<td>3</td>
</tr>
<tr>
<td>General Education course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>FNLG 2600</td>
<td>Intermediate Foreign Language</td>
<td>4</td>
</tr>
<tr>
<td>SOC 26XX Elective</td>
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**Semester Hours** 16

**Year 2**

**Fall**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
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</thead>
<tbody>
<tr>
<td>SOC 37XX Sociology elective</td>
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<tr>
<td>SOC 37XX Sociology elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>General Education course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>General Education course</td>
<td>3</td>
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</tr>
<tr>
<td>General Education NS with lab</td>
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</tbody>
</table>

**Semester Hours** 16

**Spring**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOC 37XX Sociology elective</td>
<td>3</td>
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</tbody>
</table>
Minor in Biological Anthropology

Course in Minor 3
General Education course 3
Semester Hours 15

Year 3
Fall
SOC 3749 Sociological Theory 3
SOC 37XX Sociology elective 3
Course in Minor 3
37XX Course in Minor 3
37XX Upper division Elective 3
Semester Hours 15

Spring
SOC 3701 Social Statistics 4
SOC 37XX Sociology elective 3
37XX Course in Minor 3
37XX Course in Minor 3
Semester Hours 13

Year 4
Fall
SOC 4850 Research Methods 3
SOC 4859 Senior Thesis 1 1
SOC 4800 Undergraduate Research 1
37XX Course in Minor 3
37XX Upper division Elective 3
Elective course 3
Semester Hours 14

Spring
SOC 4860 Senior Thesis 2 3
Elective course 3
Elective course 3
Elective course 3
Elective course 3
Semester Hours 15

Total Semester Hours 118

Minor in Cultural Anthropology

18 hours required to complete minor. Some courses may be taken twice with different topics.

Required Courses

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 1500</td>
<td>Introduction to Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 3705</td>
<td>Cultural Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 3760</td>
<td>Cultures of the Old World (can be taken twice with different topics)</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 3761</td>
<td>Cultures of the New World (can be taken twice with different topics)</td>
<td>3</td>
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Select up to two of the following:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
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</thead>
<tbody>
<tr>
<td>ANTH 4801</td>
<td>Anthropological Thought</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 4815</td>
<td>Anthropology of Religion</td>
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Total Semester Hours 18

Minor in General Anthropology

Required Courses

<table>
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<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
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</thead>
<tbody>
<tr>
<td>ANTH 1500</td>
<td>Introduction to Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 3702</td>
<td>Archaeology</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 3703</td>
<td>Biological Anthropology</td>
<td>4</td>
</tr>
<tr>
<td>ANTH 3705</td>
<td>Cultural Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 3778</td>
<td>Archaeological Techniques 1</td>
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</table>

Electives

Select 6 s.h. of anthropology electives.

Total Semester Hours 19

Minor in Archaeology

Required Courses

<table>
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<th>TITLE</th>
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</thead>
<tbody>
<tr>
<td>ANTH 1500</td>
<td>Introduction to Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 1503</td>
<td>The Rise and Fall of Civilizations</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 3702</td>
<td>Archaeology</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 3777</td>
<td>Method and Theory in Archaeology</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 4877</td>
<td>New World Archaeology: Topics</td>
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Electives

Select two of the following:

<table>
<thead>
<tr>
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<th>TITLE</th>
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<tbody>
<tr>
<td>ANTH 3775</td>
<td>Native North Americans</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 4824</td>
<td>Old World Prehistory: Topics</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 5805</td>
<td>Remote Sensing 1</td>
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Students may substitute one of the following for an elective course:

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<thead>
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</thead>
<tbody>
<tr>
<td>GEOG 2611</td>
<td>Geospatial Foundations</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 5805</td>
<td>Geospatial Foundations</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 5977</td>
<td>Fieldwork in Historical and Industrial Sites Archaeology</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Semester Hours 18

1 Placement test in English, math, and foreign languages required before registration for classes.

LEARNING OUTCOMES

The department's learning outcomes for sociology majors are as follows:

- Students can demonstrate understanding of the discipline of sociology and its role in contributing to our understanding of social reality.
- Students can critically evaluate various theoretical perspectives in sociology.
- Students can demonstrate comprehension of the scientific process and evaluate various qualitative and quantitative methods.
- Students can synthesize theory and methods by designing, implementing, and completing an empirical research project.
- Students can evaluate research in at least one substantive area within sociology in depth.

Minor in Biological Anthropology

Required Courses

<table>
<thead>
<tr>
<th>COURSE</th>
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<tbody>
<tr>
<td>ANTH 1500</td>
<td>Introduction to Anthropology</td>
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</table>

Total Semester Hours 18
ANTH 3778 Archaeological Techniques is a variable credit course. Students may register for 1-9 credits, depending on the duration of the fieldwork. For the minor, students must complete 3 SH of fieldwork.

### Minor in Sociology

<table>
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<tr>
<td>SOC 3705</td>
<td>The Family</td>
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<tr>
<td>SOC 3740</td>
<td>Complex Organizations</td>
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<td>SOC 3741</td>
<td>Social Movements</td>
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<tr>
<td>SOC 3745</td>
<td>Sociology of Health, Illness, and Healthcare</td>
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<td>Gender in Society</td>
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<tr>
<td>SOC 3700</td>
<td>Minority Groups</td>
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<tr>
<td>SOC 3743</td>
<td>Social Stratification and Inequality</td>
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<td>SOC 3798O</td>
<td>ST Culture and People of China</td>
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<tr>
<td>SOC 3798X</td>
<td>Select Topics in Sociology Race, Gender, Soc Class, Crime</td>
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<td>SOC 2630</td>
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<td>SOC 3707</td>
<td>Urban Sociology</td>
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<td>SOC 3735</td>
<td>Juvenile Delinquency</td>
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<td>SOC 3731</td>
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<td>SOC 3755</td>
<td>Theories of Gerontology</td>
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<td>SOC 3756</td>
<td>Aging and Ethnicity</td>
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<td>SOC 3757</td>
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<td>SOC 3759</td>
<td>Sociology of Dementia</td>
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<td>SOC 4821</td>
<td>Internship in Sociology</td>
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Total Semester Hours 18

### Department of Psychological Sciences and Counseling

Welcome to the Psychology Program

Psychology is a great major! The Bachelor of Arts Program in Psychology is the largest major in the College of Liberal Arts and Social Sciences, and one of the most popular at YSU because an understanding of human behavior is essential for most professions and careers.

The Bachelor of Arts degree may be appropriate for students seeking:

- a general liberal arts degree
- paraprofessional employment
- preparation for graduate study in psychology

We have faculty who teach all major specialties of the field including clinical, personality, learning, cognitive, developmental, physiological, health, and social psychology.

As the theme of the Psychology Program is **Student and Community Success**, faculty members conduct research into topics such as resilience and protective factors; mental and physical health, wellness, and fitness; learning persistence; motivation; personal beliefs; and developing critical thinking.

We are unique because we:

- are focused upon student success,
- have small classes that are mostly taught by full-time faculty members,
- conduct personal advising,
- inspire students to participate in research opportunities with faculty,
- encourage student engagement through study-abroad experiences, traveling to conferences, joining Psi Chi, and doing fieldwork / internship placements.

For more information, visit the Psychology [Program](http://www.ysu.edu/academics/college-liberal-arts-social-sciences/psychology-major/) or call (330) 941-3401

The Bachelor of Arts in psychology can be earned in eight semesters if students average 15-16 hours per semester. Psychology majors must select an official minor as listed in the Undergraduate Catalog.

Chair

Joffrey T. Coldren, Ph.D., Professor, Acting Chair

Professor

Jeffrey B. Allen, Ph.D., Professor

Jane Beese, Ed.D., Associate Professor

Kristin L. Brun, Ph.D., Assistant Professor

Jaelyn Farris, Ph.D., Assistant Professor

Stephen R. Flora, Ph.D., Professor

Karen Giorgetti, Ph.D., Associate Professor

Carrie R. Jackson, D.Ed., Assistant Professor

Charles Jeffords, Ed.D., Assistant Professor

James Juergensen, Ph.D., Assistant Professor

Victoria E. White Kress, Ph.D., Professor

Karen H. Larwin, Ph.D., Associate Professor

Matthew Lindberg, Ph.D., Associate Professor

Don Martin, Ph.D., Professor

Kenneth L. Miller, Ph.D., Professor

Jake J. Protivnak, Ph.D., Professor

Michael Raulin, Ph.D., Associate Professor

Sharon A. Stringer, Ph.D., Professor

Ying Joy Tang, Ph.D., Assistant Professor

Richard W. VanVoorhis, D.Ed., Associate Professor

Charles B. Vergon, J.D., Professor

Amy E. Williams, Ph.D., Assistant Professor

Lecturer
Swati Sethi, M.A., Senior Lecturer

**Majors**

- BA in Psychology (p. 248)
- BA in Psychology - Pre-Physical Therapy (p. 249)

**Minors**

- General Psychology Minor (p. 250)
- Developmental Psychology Minor (p. 250)
- Psychology of Mental Health Minor (p. 250)

**PSYC 1560 General Psychology 3 s.h.**

An examination of scientific and clinical approaches to understanding the relationships between one’s physical, mental, and emotional well-being, and quality of life, including the basic principles governing the growth and maintenance of behavior, emotion, and cognition.

Gen Ed: Social Science.

**PSYC 2617 Research Methods for Psychology 3 s.h.**

An introduction to psychological research methods. Students learn how to conduct ethical research and report their findings as well as to critically evaluate the research of others.

Prereq.: "C" or better in PSYC 1560, psychology major or minor, or consent of instructor.

**PSYC 2618 Statistics for Psychology 4 s.h.**

Further exploration of psychological research methods and statistical analysis, with emphasis on descriptive and inferential techniques. Three hours of lecture, two hours of lab per week.

Prereq.: "C" or better in PSYC 2617 and psychology major, or consent of instructor.

**PSYC 2692 Human Sexuality 3 s.h.**

An interdisciplinary approach to the study of human sexuality. Listed also as PHLT 2692.


**PSYC 3700 Social Psychology 3 s.h.**

Examination of the influence of social interactions on the thoughts, feelings, and behaviors of the individual and the group.

Prereq.: PSYC 1560.

Gen Ed: Social Science.

**PSYC 3700L Social Psychology Laboratory 1 s.h.**

An introduction to planning and conducting social psychological research. Topics include creating participant impact while minimizing loss of control, reducing demand characteristics and experimenter bias, and enhancing mundane and experimental realism. Two hours per week.

Prereq.: PSYC 2617 with grade of "C" or better and PSYC 3700 or PSYC 3700H (may be taken concurrently).

**PSYC 3702 Abnormal Psychology 3 s.h.**

Patterns of deviant behavior, including current systems of classification; classic syndromes; the nature and trend of major maladjustments; possible causative factors; and methods of prevention and treatment.

Prereq.: PSYC 1560.

**PSYC 3702L Abnormal Psychology Laboratory 1 s.h.**

An introduction to conducting research on psychological disorders, to include a critical review of research literature, examination of case studies, and gathering field-based data. Two hours per week.

Prereq.: PSYC 2617 with grade of "C" or better and 3702 or PSYC 3702H (may be taken concurrently).

**PSYC 3705 Psychology of Learning 3 s.h.**

A study of the learning process with emphasis on factors such as reinforcement, respondent conditioning, discrimination, generalization, transfer, etc.; an introduction to modern learning theory.

Prereq.: PSYC 2617; Must be taken concurrent with PSYC 3705L.

**PSYC 3705L Psychology of Learning Laboratory 1 s.h.**

Laboratory studies of learning processes. Students use observational and data-recording techniques relevant to investigations of learning processes. Laboratory activities include investigations of classical conditioning, reinforcement, shaping, extinction, practice effects or other phenomena. Two hours per week.

Prereq.: Must be taken concurrently with PSYC 3705.

**PSYC 3707 Psychology of Intimate Relationships 3 s.h.**

Psychological principles pertaining to intimate relationships, both marital and non-marital, and family dynamics. Includes topics such as communication, problem solving, domestic violence, and sexuality.

Prereq.: PSYC 1560.


**PSYC 3709 Psychology of Education 3 s.h.**

Principles of psychology as applied to the educational process, including characteristics of the individual learner, the classroom, the instructor, methods and techniques, and other factors in the learning process.

Prereq.: PSYC 1560.

**PSYC 3709L Psychology of Education Laboratory 2 s.h.**

Application of principles of psychology in a K-12 educational setting. Evaluation and synthesis of psychological principles, theories, and research. Three hours per week, one hour to be arranged.

Prereq.: PSYC 1560.

Concurrent: PSYC 3709 or consent of instructor.

**PSYC 3710 Psychophysiology 3 s.h.**

An introduction to the relationship between the psychological and physiological basis of behavior. Response systems, such as cardiovascular, respiratory, and gastrointestinal, as well as applications of principles and theories.

Prereq.: PSYC 2617, concurrent with PSYC 3710L.

**PSYC 3710L Psychophysiology Laboratory 1 s.h.**

Measurement and research techniques in basic and applied psychophysiology. Two hours laboratory discussion.

Prereq.: Must be taken concurrently with PSYC 3710.

**PSYC 3712 Industrial/Organizational Psychology 3 s.h.**

Principles of psychology applied to business and industry with emphasis upon both personnel and organizational behavior. Topics include job analysis, selection, performance appraisal, organizational development, job satisfaction, motivation, and leadership.

Prereq.: PSYC 2617 or equivalent.

**PSYC 3720 Motivation 3 s.h.**

Classical and contemporary theories of motivation. Overview of research and theory on the interactive role of biological, learned, and cognitive components in motivation of human behavior, including emotion, need for achievement, affiliation, and power.

Prereq.: PSYC 2617.

**PSYC 3724 Advanced Statistical Methods in Psychology 3 s.h.**

A continuation of inferential statistics: complex analysis of variance and nonparametric statistics; additional study of special correlational techniques and concepts of regression and prediction. Recommended for the student preparing to seek an advanced degree.

Prereq.: "C" or better in PSYC 2618.

**PSYC 3728 Physiological Psychology 3 s.h.**

The structural-functional relationships of the various divisions of the neural system, their relationship to the organism as a whole, and their contributions to human behavior.

Prereq.: PSYC 2617.

**PSYC 3728L Physiological Psychology Laboratory 1 s.h.**

An introduction to experimental methods for studying effects of environmental stimuli on brain function and behavior in animals. Two hours per week. Permit required.

Prereq.: PSYC 2617 with grade of "C" or better and PSYC 3728 (may be taken concurrently).
PSYC 3730  Psychology of Gender  3 s.h.
An exploration of psychological research and theories as they apply to gender issues. An optional lab is available.
Prereq.: PSYC 1560.

PSYC 3730L  Psychology of Women Laboratory  1 s.h.
Laboratory and field-based research techniques relating to the study of women and to gender similarities and differences. Two hours per week.
Prereq.: PSYC 2617 with grade of "C" or better and PSYC 3730 (may be taken concurrently).

PSYC 3734  ABA Principles 1: Applied Behavior Analysis  3 s.h.
Scientific and conceptual foundations of applied behavior analysis. Basic principles of behavior analysis and application in applied settings are emphasized. The behavioral approach is contrasted with other approaches to the understanding and treatment of behavior, with a focus on scientific criteria and methodological differences. Ethical standards are covered.
Prereq.: PSYC 1560.

PSYC 3740  Psychological Measurement  3 s.h.
Theories and principles of test construction, and an overview of psychological tests and questionnaires use in mental health, educational, and vocational settings.
Prereq.: PSYC 2618.

PSYC 3740L  Psychological Measurement Laboratory  1 s.h.
Application of psychological measurement techniques, test construction, and psychometric analyses. Optional lab, but must be taken concurrently with PSYC 3740.
Prereq.: PSYC 2618.

PSYC 3750  Special Topics in Psychology  3 s.h.
Selected areas of study not covered in the mainstream curriculum. May be repeated with different topics to a maximum of 9 s.h. toward the major.
Prereq.: PSYC 1560.

PSYC 3750N  Special Topics in Psychology Psychological Aspects of Health and Well-Being  3 s.h.
Selected areas of study not covered in the mainstream curriculum. May be repeated with different topics to a maximum of 9 s.h. toward the major.
Prereq.: PSYC 1560.

PSYC 3750O  Special Topics in Psychology Stigma and Resilience  3 s.h.
Selected areas of study not covered in the mainstream curriculum. May be repeated with different topics to a maximum of 9 s.h. toward the major.
Prereq.: PSYC 1560.

PSYC 3750P  Special Topics in Psychology Adverse Control of Human Behavior  3 s.h.
Selected areas of study not covered in the mainstream curriculum. May be repeated with different topics to a maximum of 9 s.h. toward the major.
Prereq.: PSYC 1560.

PSYC 3750Q  Special Topics in Psychology Psychology of Meaning and a Life Well 3 s.h.
Selected areas of study not covered in the mainstream curriculum. May be repeated with different topics to a maximum of 9 s.h. toward the major.
Prereq.: PSYC 1560.

PSYC 3750R  Special Topics in Psychology Decision Science  3 s.h.
Selected areas of study not covered in the mainstream curriculum. May be repeated with different topics to a maximum of 9 s.h. toward the major.
Prereq.: PSYC 1560.

PSYC 3755  Child Development  3 s.h.
Foundations of human development from conception through approximately the first decade of life. Fundamental issues of developmental processes in biological, cognitive, and social-emotional domains and their broader implications for society and later development of the individual.
Prereq.: PSYC 1560.
Gen Ed: Social Science.

PSYC 3755L  Child Development Laboratory  1 s.h.
Experimental and nonexperimental research methods for gathering data on the development of children. Two hours per week. A criminal background check is required to take the course.
Prereq.: PSYC 2617 with "C" or better and PSYC 3755 (may be taken concurrently).

PSYC 3756  Adolescent Development  3 s.h.
Human development from preteen to young adulthood.
Prereq.: PSYC 1560.

PSYC 3757  Adult Development  3 s.h.
Human development from adulthood through old age.
Prereq.: PSYC 1560.

PSYC 3758  Lifespan Development  3 s.h.
Study of theory and research on development from conception to death. Focus upon psychological, physiological, social and cultural influences. May not be taken for credit if the student has received credit for two or more of PSYC 3755, PSYC 3756, PSYC 3757.
Prereq.: PSYC 1560.

PSYC 3760  Perception  3 s.h.
Theories and experimental evidence on how environmental, physiological, and personal factors influence the reception, organization, and interpretation of sensory input.
Prereq.: PSYC 2617; Must be taken concurrent with 3760L.

PSYC 3760L  Perception Laboratory  1 s.h.
Laboratory demonstrations and experiments using research techniques in perception. Two hours per week.
Concurrent: PSYC 3760.

PSYC 3761  Cognition  3 s.h.
Experimental methods, research findings, and current theories concerned with human cognitive processes. The information-processing approach, focusing on how information is transformed, stored, manipulated, and retrieved. Topics include attention, pattern recognition and categorization, memory, and language.
Prereq.: PSYC 2617; Must be taken concurrent with PSYC 3761L.

PSYC 3761L  Cognition Laboratory  1 s.h.
Laboratory demonstrations and experiments using research techniques in cognition. Two hours per week.
Prereq.: Must be taken concurrently with PSYC 3761.

PSYC 3770  Individual Study  1-2 s.h.
Individual study of a special problem, or a review of the literature relating to a specific psychological problem or issue. A written report is required, one copy of which remains on file in the department. May be repeated for a maximum of 4 s.h. with different problems.
Prereq.: PSYC 1560 and consent of the chairperson.

PSYC 3775  Personality  3 s.h.
A critical overview of the major personality theories and theorists in the field of psychology, their application to the understanding of everyday life and a description of the pertinent research applicable to the evaluation of personality theories.
Prereq.: PSYC 1560.

PSYC 3777  Cross-Cultural Social Psychology  3 s.h.
A psychological examination of the impact of culture on individual social behavior as applied to topics such as attribution, moral reasoning, gender differences, and group dynamics.
Prereq.: PSYC 3700 or ASST 1550.

PSYC 3779  Careers in Psychology  3 s.h.
Overview of professional development, including information on career preparation, job search strategies, and graduate studies.
Prereq.: PSYC 1560.
PSYC 3780 Psychological Aspects of Disease and Death 3 s.h.
The primary factors affecting an individual's attitude toward illness, bereavement, and mortality. The psychological and physiological aspects of disease processes and death.
Prereq.: PSYC 1560.

PSYC 3785H Honors Seminar in Psychology 1 s.h.
Study of selected topics within psychology suitable to the honors program.
Prereq.: Admission to the Psychology Honors Program, permit required.

PSYC 3790 Field Work in Psychology 3 s.h.
Exploration of different types of work and issues encountered in professional positions within the field of psychology. Supervised field work hours (approximately 4 hours per week) will be arranged. Criminal background check required. May be repeated one time.
Prereq.: 9 s.h. in Psychology, junior/senior standing, and consent of chair.

PSYC 4800 Introduction to Psychotherapy 3 s.h.
A critical overview of major psychotherapeutic approaches to mental health including an evaluation of empirical validity. Students will develop an increased sensitivity to multicultural and ethical issues.
Prereq.: PSYC 3702 or PSYC 3775.

PSYC 4815 Health Psychology 3 s.h.
Psychosocial factors that affect the promotion and maintenance of health, as well as the prevention and treatment of illness.
Prereq.: 6 s.h. of 3700-level PSYC courses.

PSYC 4835 Special Topics in Developmental Psychology 3 s.h.
Advanced and specialized topics in developmental psychology. Topics vary over semesters, and may include the study of infancy, the development of exceptional children, cross-cultural developmental psychology, among others. May be repeated with different topics to a maximum of 6 s.h. toward the major.
Prereq.: PSYC 3755 or PSYC 3756 or PSYC 3757 or PSYC 3758.

PSYC 4835D Special Topics Devel Psych Children and Family in China and the US: A Research Method Approach 3 s.h.
Advanced and specialized topics in developmental psychology. Topics vary over semesters, and may include the study of infancy, the development of exceptional children, cross-cultural developmental psychology, among others. May be repeated with different topics to a maximum of 6 s.h. toward the major.
Prereq.: PSYC 3755 or PSYC 3756 or PSYC 3757 or PSYC 3758.

PSYC 4841 History of Psychology 3 s.h.
The development of scientific psychology, with major emphasis on trends since the mid-19th century.
Prereq.: 9 s.h. of psychology.

PSYC 4850 Seminar 2 s.h.
Major topics in psychology not covered in listed courses. Two s.h. may be applied to the psychology major.
Prereq.: Senior standing in psychology, or consent of instructor.

PSYC 4857 Biopsychological Aspects of Health and Aging 3 s.h.
Broad overview of development and change across the adult lifespan, focusing on an examination and understanding of biological aging and how they affect functioning, adjustment, and wellness. Distinction between primary aging (normal, universal biological changes) and secondary aging (disease, lifestyle-determined changes) will be made.
Prereq.: PSYC 3757 or PSYC 3758.

PSYC 4890 Senior Thesis 1 s.h.
Data collection and a research paper on a topic approved by the thesis advisor. This project takes two semesters to complete. Must be repeated for a maximum of 2 s.h.
Prereq.: Senior status, grade of "C" or better in PSYC 2618, one PSYC lab course, & consent of thesis advisor & chair.
Gen Ed: Capstone.

PSYC 4891H Honors Thesis 1 s.h.
The student prepares an empirical research paper on a topic approved by an honors thesis advisor and honors thesis committee. May be repeated for a maximum of 4 s.h.
Prereq.: Senior status, C or better in PSYC 2618, one PSYC lab course, consent of thesis advisor & chair, and admission into the Honors Program.
Gen Ed: Capstone.

PSYC 4895 Senior Psychology Capstone Experience 2 s.h.
A capstone experience for the major in psychology.
Prereq.: Senior status, grade of "C" or better in PSYC 2618, one PSYC lab course, and consent of thesis advisor and chair.
Gen Ed: Capstone.

Bachelor of Arts in Psychology

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<td><strong>FIRST YEAR REQUIREMENT -STUDENT SUCCESS</strong></td>
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<td>ENGL 1551</td>
<td>Writing 2</td>
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<td>CMST 1545</td>
<td>Communication Foundations</td>
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<td>Social and Personal Awareness (6 s.h.)</td>
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<td>PSYC 1560</td>
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<td>PSYC 2617</td>
<td>Research Methods for Psychology</td>
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<td>PSYC 2618</td>
<td>Statistics for Psychology</td>
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<td><strong>Clinical</strong></td>
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<td>PSYC 3702 or PSYC 3775</td>
<td>Abnormal Psychology or Personality</td>
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<td>Only two development courses may count towards the major.</td>
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<td>PSYC 3755</td>
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<td>PSYC 3705</td>
<td>Psychology of Learning</td>
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<td>PSYC 3760 or 3760L</td>
<td>Perception and Perception Laboratory</td>
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<td>PSYC 3761 or 3761L</td>
<td>Cognition and Cognition Laboratory</td>
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<tr>
<td>PSYC 3710 or 3710L</td>
<td>Psychophysiology and Psychophysiology Laboratory</td>
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Youngstown State University Undergraduate

PSYC 3728  Physiological Psychology

Capstone Course
Required - Select one of the following: 2
- PSYC 4890  Senior Thesis (repeated for 2 s.h.)
- PSYC 4891H  Honors Thesis (repeated for 2 s.h.)
- PSYC 4895  Senior Psychology Capstone Experience

Additional Courses
Select 9 hours in courses applicable to the psychology major, excluding PSYC 3770 or PSYC 3790. 9
Select 3 hours in any course applicable to the major. 3

Minor Requirement 18
Electives 20

Total Semester Hours 120-124

Two laboratories related to any psychology course are required.

Note: Remedial coursework needs to be taken first and will most likely require students to attend summer sessions in order to complete a BA in Psychology within four years.

Year 1

Fall  S.H.
YSU 1500  Success Seminar 1
PSYC 1560  General Psychology (Social Science) 3
ENGL 1550  Writing 1 3-4
or ENGL 1549  or Writing 1 with Support
First-Year Experience / GER Elective 3
MATH 2623  Quantitative Reasoning 4
FNLG 1550  Elementary Foreign Language 3

Semester Hours 17-18

Spring
PSYC 26XX/37XX Social and Personal Awareness (e.g. PSYC 3700) 3
Natural Science 15XX/26XX 3
ENGL 1551  Writing 2 3
Arts/Humanities 15XX/26XX 3
FNLG 2600  Intermediate Foreign Language 3

Semester Hours 16

Year 2

Fall
PSYC 2617  Research Methods for Psychology 3
Arts/Humanities 15XX/26XX 3
Minor 15XX/26XX course 3
CMST 1545  Communication Foundations 3
PSYC/Social Science 37XX (e.g. PSYC 3700) 3

Semester Hours 15

Spring
PSYC 2618  Statistics for Psychology 4
Natural Science + Lab 15XX/26XX 4
Minor 15XX/26XX/37XX course 3
PSYC/Social and Personal Awareness 26XX/37XX (e.g. PSYC 3750) 3
PSYC/Gen Ed 26XX/37XX Elective (e.g. PSYC 2692 or PSYC 3755) 3

Semester Hours 17

Year 3

Fall
PSYC 37XX Clinical (e.g. PSYC 3702 or PSYC 3775) 3
PSYC 37XX Physiological 3
PSYC 37XX Lab 1

PSYC 37XX elective 3
Minor 37XX course 3
ELECTIVE 15XX/26XX/37XX (rec. major or minor - 37XX course) 3

Semester Hours 16

Spring
PSYC 37XX Cognition, Learning, or Perception 3
PSYC 37XX Lab 1
PSYC 37XX Elective 3
Minor 37XX course 3
Minor 37XX course 3
ELECTIVE 37XX course (rec. major or minor - 37XX course) 3

Semester Hours 16

Year 4

Fall
PSYC 37XX Elective 3
PSYC 37XX Elective 3
Minor 37XX/48XX course 3
ELECTIVE 37XX 3

Semester Hours 12

Spring
PSYC 4895  Senior Psychology Capstone Experience 2
Minor 37XX/48XX course (if needed, otherwise elective) 3
PSYC 37XX Elective 3
ELECTIVE XXXX 3
ELECTIVE XXXX 3

Semester Hours 14

Total Semester Hours 123-124

Learning Outcomes
1. Students will discriminate amongst the fundamental psychological concepts.
2. Students will demonstrate the ability to clearly communicate ideas in both oral & written forms using APA style.
3. Students will evaluate research using professionally accepted criteria.
4. Students will devise solutions to real-life problems by applying psychological concepts.
5. Students will interpret topics and discussions related to human diversity.

Bachelor of Arts in Psychology - Pre-Physical Therapy Track

COURSE  TITLE  S.H.
FIRST YEAR REQUIREMENT - STUDENT SUCCESS  S.H.
YSU 1500  Success Seminar 1-2
or SS 1500  Strong Start Success Seminar
or HONR 1500  Intro to Honors

General Education Requirements
ENGL 1550  Writing 1 3-4
or ENGL 1549  or Writing 1 with Support
ENGL 1551  Writing 2 3
CMST 1545  Communication Foundations 3
Mathematics Requirement 3
Arts and Humanities (6 s.h.) 6
Natural Sciences (2 courses, 1 with lab) (6-7 s.h.) 7
Social Science (6 s.h.) 6
Social and Personal Awareness (6 s.h.) 6
Minor in Developmental Psychology

COURSE | TITLE | S.H.
---|---|---
PSYC 1560 | General Psychology | 3
PSYC 3705 | Child Development | 3
PSYC 3756 | Adolescent Development | 3
PSYC 3757 | Adult Development | 3

An additional 6 s.h. in Psychology from the following courses:
PSYC 2692 | Human Sexuality | 3
PSYC 3702 | Abnormal Psychology | 3
PSYC 3709 | Psychology of Education | 3
PSYC 3734 | ABA Principles 1: Applied Behavior Analysis | 3
PSYC 4835 | Special Topics in Developmental Psychology | 3

Total Semester Hours: 18

Minor in General Psychology

COURSE | TITLE | S.H.
---|---|---
PSYC 1560 | General Psychology | 3
PSYC 3700 | Social Psychology | 3
PSYC 3702 | Abnormal Psychology | 3
or PSYC 3775 | Personality | 3

Select one of the following:
PSYC 3755 | Child Development | 3
PSYC 3756 | Adolescent Development | 3
PSYC 3757 | Adult Development | 3
PSYC 3758 | Lifespan Development | 3
Any additional 6 S.H. in Psychology | 6

Total Semester Hours: 18

Minor in Psychology of Mental Health

COURSE | TITLE | S.H.
---|---|---
PSYC 1560 | General Psychology | 3
PSYC 3702 | Abnormal Psychology | 3
PSYC 3775 | Personality | 3
PSYC 4800 | Introduction to Psychotherapy | 3
Any additional 6 S.H. in Psychology | 6

Total Semester Hours: 18

Associate of Arts in CLASS Associate of Arts

Welcome! The Beeghly College of Liberal Arts, Social Sciences, and Education offers a general associate-level degree to students. This two-year degree encompasses general education courses, a concentration of the humanities, social sciences, or natural sciences, and elective hours.

The Associate of Arts (AA) degree allows students to: a) increase their earning potential or increase their level of responsibility within a current position; b) complete YSU’s Ohio transfer module (OTM) which ensures coursework will transfer to another state institution within Ohio; c) serve as a short-term goal on their way to a baccalaureate level degree; and d) earn a degree using courses already completed.
To inquire about earning the Associate of Arts degree, please contact an advisor in the Division of Academic Advising in the Beeghly College of Liberal Arts, Social Sciences, and Education.

Contact Information
Division of Academic Advising
DeBartolo Hall, Room 121
(330) 941-3413

Associate of Arts (AA) Requirements:
All courses completed for the Associate of Arts general education model must be Ohio Transfer Module (OTM) approved.

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
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<tbody>
<tr>
<td>FIRST YEAR REQUIREMENT - STUDENT SUCCESS</td>
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<tr>
<td>YSU 1500</td>
<td>Success Seminar</td>
<td>1-2</td>
</tr>
<tr>
<td>or SS 1500</td>
<td>Strong Start Success Seminar</td>
<td></td>
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<tr>
<td>or HONR 1500</td>
<td>Intro to Honors</td>
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<tr>
<td>General Education</td>
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<td></td>
</tr>
<tr>
<td>ENGL 1550</td>
<td>Writing 1</td>
<td>3-4</td>
</tr>
<tr>
<td>or ENGL 1549</td>
<td>Writing 1 with Support</td>
<td></td>
</tr>
<tr>
<td>ENGL 1551</td>
<td>Writing 2</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1510</td>
<td>College Algebra (or other OTM general education math course)</td>
<td>4</td>
</tr>
<tr>
<td>CMST 1545</td>
<td>Communication Foundations</td>
<td>3</td>
</tr>
</tbody>
</table>

Knowledge Domains: (all General Education courses must be OTM approved courses - please consult an academic advisor regarding GER courses)

2 Natural Sciences courses + Lab (one must include a lab) | 7 |
2 Humanities Courses | 6 |
2 Social Science Courses | 6 |
GER Elective (any one additional course from the above knowledge domains) | 3 |

Concentration Area: Students choose one of three concentration areas (see list below)

Courses in the concentration must have grades of "C" or better
Elective(s): Students must complete electives to total 60sh for the AA degree min. 1

Total Semester Hours: 60

The last 20 semester hours and at least 16 s.h. of the concentration area must be completed at Youngstown State University.

Concentration Areas:
Students choose one concentration area below.

Humanities
Applicable courses include:

- literature courses in English or Foreign Language departments
- courses in philosophy and religious studies

- survey and/or appreciation courses in the Department of Art, the Department of Communication, the Department of Theatre and Dance, or the Dana School of Music
- AFST 2601 Introduction to Africana Studies 2

Social Studies
Courses must be selected from the following disciplines:

- Africana Studies (AFST 2600 Introduction to Africana Studies 1 only)
- anthropology
- economics
- human and regional geography
- history
- political science
- psychology
- sociology

Natural Sciences
Courses must be selected from the following disciplines:

- astronomy
- biology
- chemistry
- environmental science
- geology
- physics
- physical geography
- A&S/STEM 2600 (no longer offered)
Learning Outcomes

All students will:

- (1) Demonstrate effective written communication.
- (2) Develop skills to enter the work force or build upon a liberal arts foundation to succeed in upper division coursework if pursuing a baccalaureate degree.
- (3) Students will demonstrate an understanding of relationships of individuals and groups in their geographical, historical, global, societal, or cultural contexts.

Social Studies concentrations:

- (3) Students will demonstrate an understanding of relationships of individuals and groups in their geographical, historical, global, societal, or cultural contexts.

Humanities concentrations:

- (4) Students will demonstrate an understanding of artistic expression in multiple forms and contexts. (GER Learning Outcome 8)
- (5) Students will demonstrate an understanding of the humanistic perspective including philosophy, ethics, critical thinking, religious inquiry, and diversity.

Natural Science concentrations:

- (6) Students will demonstrate an understanding of the natural environment and the processes that shape it. (GER Learning Outcome 13)

Minor in Women's and Gender Studies

Women's and Gender Studies Program

Director

Dr. Cryshanna A. Jackson Leftwich

Room 436 DeBartolo Hall

(330) 941-2114

cajackson@ysu.edu

The University offers a minor in Women's and Gender Studies with the advice and approval of the chair of the department in which the student is majoring. The minor requires completion of 18 hours. For information about the Women's and Gender Studies minor, contact the director or visit Women's and Gender Studies (http://www.ysu.edu/academics/college-liberal-arts-social-sciences/womens-and-gender-studies-minor/).

COURSE | TITLE | S.H.
--- | --- | ---
WMST 2601 | Introduction to Women's Studies | 3

Select 15 semester hours from the courses listed below, with a minimum of 6 semester hours required at the 3700-level or above.

- ENGL 1560 Language, Ethnicity, and Gender
- ENGL 2617 Women in Literature
- FNGL 2660 Women in the Ancient World
- PHLT 2692 Human Sexuality
- SOC 2640 Gender in Society
- SOC 2690 Identities and Differences
- CHFM 3731 Individual and Family Development
- CJFS 4851 Women and Justice
- CMST 3750 Gender Communication
- ENGL 3732 Images of Women

Bachelor of General Studies in General Studies

For more information, visit the Bachelor of General Studies (http://www.ysu.edu/academics/college-liberal-arts-social-sciences/general-studies-major/) webpage.

The Bachelor of General Studies degree (BGS) is a degree-completion option for students who have completed significant coursework but not the requirements for a specific major. Through careful evaluation of coursework already completed at YSU or other colleges and universities, a degree completion plan is constructed for each student. The BGS may also be appropriate for students for whom a general bachelor’s degree may lead to career advancement or for those students who seek the personal satisfaction of having completed a bachelor’s degree.

Individuals who have a bachelor’s degree are not eligible for the BGS degree, and the BGS degree may not be earned concurrently with another bachelor’s degree.

All BGS students complete the requirements of the General Education curriculum (old or new). As such, the goals of the general education curriculum are met by BGS students. They are as follows:
• Write and speak effectively
• Acquire, process, and present quantitative and qualitative information using the most appropriate technologies, including computers
• Reason critically, both individually and collaboratively; draw sound conclusions from information, ideas, and interpretations gathered from various sources and disciplines; and apply those conclusions to one’s life and society

The specific requirements for the completion of the Bachelor of General Studies (B.G.S.) degree are as follows:

A 48-semester-hour concentration with at least 24 s.h. of upper-division credit comprised of:

<table>
<thead>
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<tr>
<td>or HONR 1500</td>
<td>Intro to Honors</td>
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</table>

General Education Requirements

<table>
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<tr>
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</thead>
<tbody>
<tr>
<td>ENGL 1550</td>
<td>Writing 1</td>
<td>3-4</td>
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<tr>
<td>ENGL 1551</td>
<td>Writing 2</td>
<td>3</td>
</tr>
<tr>
<td>CMST 1545</td>
<td>Communication Foundations</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics Requirement</td>
<td>3</td>
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<tr>
<td>Arts and Humanities (6 s.h.)</td>
<td>6</td>
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<tr>
<td>Social Science (6 s.h.)</td>
<td>6</td>
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<tr>
<td>Social and Personal Awareness (6 s.h.)</td>
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Major Requirements

<table>
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<tr>
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<th>TITLE</th>
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</thead>
<tbody>
<tr>
<td>AFST 2600</td>
<td>Introduction to Africana Studies 1</td>
<td>3</td>
</tr>
<tr>
<td>AFST 2601</td>
<td>Introduction to Africana Studies 2</td>
<td>3</td>
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<tr>
<td>Select two courses from the following (6 s.h.):</td>
<td>6</td>
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<tr>
<td>ENGL 4871</td>
<td>The Black Experience in American Literature</td>
<td></td>
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<tr>
<td>HIST 3730</td>
<td>The Black Experience in American History</td>
<td></td>
</tr>
<tr>
<td>HIST 3751</td>
<td>History of South Africa</td>
<td></td>
</tr>
<tr>
<td>REL 3710</td>
<td>African and Neo-African Religion</td>
<td></td>
</tr>
<tr>
<td>Select two courses from the following (6 s.h.):</td>
<td>6</td>
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<tr>
<td>ENGL 2620</td>
<td>African Literature</td>
<td></td>
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<tr>
<td>HIST 3750</td>
<td>History of Modern Africa</td>
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<tr>
<td>HIST 3751</td>
<td>History of South Africa</td>
<td></td>
</tr>
<tr>
<td>REL 3708</td>
<td>African-American Religion</td>
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<tr>
<td>REL 3750</td>
<td>Religion and Race</td>
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</tr>
</tbody>
</table>

Total Semester Hours: 18

AFST 2600 Introduction to Africana Studies 1 3 s.h.
The social-historical and intellectual heritage of black people in Africa and the Americas.
Gen Ed: Domestic Diversity, Social Science, Social and Personal Awareness.
AFST 2601 Introduction to Africana Studies 2 3 s.h.
The cultural and intellectual heritage of black people in Africa and the Americas as reflected in literature, philosophy, and art.
Gen Ed: Arts and Humanities, Domestic Diversity, Social and Personal Awareness.
AFST 3700 Africana Studies Colloquium 1 3 s.h.
A social studies seminar focusing on the historic, economic, political, or social aspects of the experiences of people of African descent. May be repeated once with different content.
Prereq.: AFST 2600.
AFST 3701 Africana Studies Colloquium 2 3 s.h.
A humanities seminar focusing on the art, music, literature and/or philosophy of people of African descent. May be repeated once with different content.
Prereq.: AFST 2601.

Minor in American Studies

Program Director
Dolores V. Sisco
245 DeBartolo Hall
(330) 941-3422

Appreciate importance and value of an interdisciplinary degree

Minor in Africana Studies

Program Director
Dr. Patrick Spearman
4409 Beeghly Hall
(330) 941-1934
ptspearman@ysu.edu

The University offers a minor in Africana Studies with the advice and approval of the chair of the department in which the student is majoring. The minor requires completion of 18 hours. For information about the Africana Studies minor, contact the director.

AFST 2600 Introduction to Africana Studies 1 3 s.h.
The social-historical and intellectual heritage of black people in Africa and the Americas.
Gen Ed: Domestic Diversity, Social Science, Social and Personal Awareness.
AFST 2601 Introduction to Africana Studies 2 3 s.h.
The cultural and intellectual heritage of black people in Africa and the Americas as reflected in literature, philosophy, and art.
Gen Ed: Arts and Humanities, Domestic Diversity, Social and Personal Awareness.
AFST 3700 Africana Studies Colloquium 1 3 s.h.
A social studies seminar focusing on the historic, economic, political, or social aspects of the experiences of people of African descent. May be repeated once with different content.
Prereq.: AFST 2600.
AFST 3701 Africana Studies Colloquium 2 3 s.h.
A humanities seminar focusing on the art, music, literature and/or philosophy of people of African descent. May be repeated once with different content.
Prereq.: AFST 2601.
American Studies offers students the opportunity to examine the central themes and issues in American life using material and approaches from a variety of disciplines. Students gain awareness of the broad outlines of American history and culture as well as an understanding of important theories of culture and ways of studying American life.

The University offers a minor in American Studies with the advice and approval of the chair of the department in which the student is majoring. The minor requires completion of 18 hours. For information about the American Studies minor, contact the director.

In addition to offering a minor in American Studies, YSU offers a Master of Arts in American Studies. For more information, consult the Graduate Catalog.

**COURSE** | **TITLE** | **S.H.**
--- | --- | ---
AMER 2601 | American Identity | 3
AMER 3701 | Approaches to American Studies | 3

Four additional upper division courses, selected from the American Studies list of approved courses, from at least two departments other than the department in which the students' major is housed, and subject to consultation with an American Studies advisor.

**Total Semester Hours**: 18

**AMER 2601**  American Identity 3 s.h.
Study of American Identity through historical, literary, artistic, material, media and other sources. Emphasis on American pluralism and cultural debates over the meaning of American identity.

**AMER 2605**  Turning Points in United States History 1 3 s.h.
Key episodes in the social, economic, political, and cultural developments of the United States to 1877, exploring how diverse peoples shaped the growing nation.

**AMER 2606**  Turning Points in United States History 2 3 s.h.
Key episodes in the social, economic, political, and cultural developments of the United States since 1877, exploring how diverse peoples shaped the growing nation.

**AMER 2610**  Work and Class in American Culture 3 s.h.
Interdisciplinary thematic exploration of work and class in American culture with emphasis on the Mahoning Valley. Includes the impact of social movements, technological developments, and new ideas and knowledge. Examines the relationship of class to such social categories as race, gender, sexuality, ethnicity, and place.

**AMER 3700**  Minority Groups 3 s.h.
Survey of the origins and characteristics of ethnic and racial minority groups, with an emphasis on the significance of membership in such a group for in-group, out-group, and community solidarity.

**AMER 3701**  Approaches to American Studies 3 s.h.
Survey of central issues and themes in American cultural studies, with emphasis on interdisciplinary approaches and cultural diversity. May focus on a theme chosen by the instructor, such as nature and culture, work, or class in America. May be repeated once with a different topic.

**AMER 3705**  Cultural Anthropology 3 s.h.
A cross-cultural comparison of the cultural norms that regulate society, emphasizing the functional prerequisites for the existence of society and individual demands on society.

**AMER 3720**  Applied Sociology 3 s.h.
Uses of sociology in practical affairs, providing theory and data for public policy, institutional reform, social action programs, and social inventions. Contributions to architectural design, industrial engineering, community planning, and innovative legislation.

**AMER 3770**  American Literature in Historical Perspective 3 s.h.
Poetry, prose, drama, and other forms of literary expression examined within the context of a specific aspect of American social, intellectual, and cultural history. May be repeated once with different topic.

**AMER 4801**  American Studies Research Seminar 3 s.h.
Capstone seminar. Focuses on development and implementation of research proposal and current American studies research related to topics chosen by students for their senior projects.

**AMER 4810**  Independent Project in American Culture 1-3 s.h.
Work with faculty advisor on senior projects. A total of 3 s.h. is required for completion of the major. May be repeated with permission of coordinator.

**AMER 4815**  American Material Culture 3 s.h.
A discussion and analysis of the use and importance of material artifacts as texts for the recovery of the American past. Emphasis on sources not traditionally utilized by historians. Examples include the contextual analysis of children's books, foodways, and sacred spaces.

**AMER 5845**  Work in America 3 s.h.
Examines the changing characteristics, expectations, and representations of work in America. Includes the exploration of demographic, historic, economic, technological, sociological, religious, ethical, popular, and poetic perspectives on work.

**AMER 5850**  Class and Culture 3 s.h.
Theories of social class structure and formation, relationships between class and culture, representations of class and work, intersections of class with other aspects of cultural identity (race, gender, sexuality, place), and theories and methods of working-class studies.

**AMER 6900**  Approaches to American Studies 3 s.h.
Introduction to American studies with emphasis on history of the field, interdisciplinary approaches, and cultural diversity.

**AMER 6910**  Introduction to Working-Class Studies 3 s.h.
Introduction to developments, approaches, and issues in new working-class studies, including intersections of class with other categories of identity, disciplinary and interdisciplinary perspectives, representations of the working class in the arts and media, and political and economic constructions of class.

**AMER 6930**  Humanities in the Community 3 s.h.
Opportunities, challenges, and strategies for developing, promoting, and implementing public humanities projects in various settings, including community development and organizing, community-based adult education, and programs in museums and other public humanities organizations.

Prereq.: AMER 6900.

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dvisisco@ysu.edu

The University offers a minor in American Studies with the advice and approval of the chair of the department in which the student is majoring. The minor requires completion of 18 hours. For information about the American Studies minor, contact the director.

In addition to offering a minor in American Studies, YSU offers a Master of Arts in American Studies. For more information, consult the Graduate Catalog.
Another important goal of the college is to provide the University and the surrounding community optimal opportunities for experiencing the visual and performing arts. Students not pursuing degrees in art, music, or theatre & dance as a means of education in the visual and performing arts. Students not pursuing degrees in art, music, or theatre & dance as a means of education in the visual and performing arts. Students not pursuing degrees in art, music, or theatre & dance as a means of education in the visual and performing arts. 

**Academic Programs**

The college holds as its primary goal the highest quality of instruction, including pre-professional training in areas such as studio art, applied music, and theatre & dance; the training of teachers; and the offering of a wide variety of courses to non-majors from all areas of the University.

The major programs in the college constitute an outstanding basis for an education in the visual and performing arts. Students not pursuing degrees in the Cliffe College of Creative Arts are welcomed and encouraged to participate in special opportunities in art, music, or theatre & dance as a means of broadening and complementing their university experience.

Another important goal of the college is to provide the University and surrounding community optimal opportunities for experiencing the visual and performing arts.

**Degrees, Majors and Minors**

The degrees granted are the Bachelor of Arts (BA), Bachelor of Fine Arts (BFA), and Bachelor of Music (BM).

Majors are offered in:

- Studio Art ([https://catalog.ysu.edu/undergraduate/colleges-programs/college-creative-arts-communication/department-art/#programsofstudytext](https://catalog.ysu.edu/undergraduate/colleges-programs/college-creative-arts-communication/department-art/#programsofstudytext))
- Art Education ([https://catalog.ysu.edu/undergraduate/colleges-programs/college-creative-arts-communication/department-art/#programsofstudytext](https://catalog.ysu.edu/undergraduate/colleges-programs/college-creative-arts-communication/department-art/#programsofstudytext))
- Music Education ([https://catalog.ysu.edu/undergraduate/colleges-programs/college-creative-arts-communication/school-music/#programsofstudytext](https://catalog.ysu.edu/undergraduate/colleges-programs/college-creative-arts-communication/school-music/#programsofstudytext))
- Music History and Literature
- Music Theory or Composition ([https://catalog.ysu.edu/undergraduate/colleges-programs/college-creative-arts-communication/school-music/#programsofstudytext](https://catalog.ysu.edu/undergraduate/colleges-programs/college-creative-arts-communication/school-music/#programsofstudytext))
- Theatre ([https://catalog.ysu.edu/undergraduate/colleges-programs/college-creative-arts-communication/department-theater-dance/#programsofstudytext](https://catalog.ysu.edu/undergraduate/colleges-programs/college-creative-arts-communication/department-theater-dance/#programsofstudytext))
- Musical Theatre Track ([https://catalog.ysu.edu/undergraduate/colleges-programs/college-creative-arts-communication/department-theater-dance/#programsofstudytext](https://catalog.ysu.edu/undergraduate/colleges-programs/college-creative-arts-communication/department-theater-dance/#programsofstudytext))

Minors are offered in:

- 3D Studies
- Art History
- Dance
- Digital Media
- Film Studies
- Graphic Design
- Interactive Design
- Interdisciplinary Studio Art
- Music
- Musical Theatre
- Painting
- Photography
- Printmaking
- Puppetry
- Theatre

**State-of-the-Art Learning Facilities**

The activities of the college are conducted primarily in Bliss Hall, which houses the administrative offices of the college as well as over 150,000 square feet of specialized classrooms, studios, laboratories, and performance areas serving most of the curricular and co-curricular programs in art, music, and theatre & dance. Additional activities are held in the John J. McDonough Museum of Art ([https://ysu.edu/mcdonough-museum/](https://ysu.edu/mcdonough-museum/)), The Butler Institute of American Art ([https://butlerart.com/](https://butlerart.com/)), Beecher Center, Stambaugh Auditorium ([https://www.stambaughauditorium.com/](https://www.stambaughauditorium.com/)), and the DeYor Performing Arts Center ([https://www.youngstownsymphony.com/](https://www.youngstownsymphony.com/)).

**Student Experiences**

Our innovative academic experiences empower our students to succeed in their educational and professional endeavors. Students in Cliffe College have the opportunity to participate in national and international performance venues; numerous study abroad programs, including those in Scotland,
Brazil and the United Kingdom; and internships with regional and national businesses, including the Youngstown Business Incubator, Cafaro Company, Pittsburgh Ballet Company, and Time Warner Cable.

Community Engagement

Cliffe College is a vital cultural asset to the YSU campus, the Mahoning Valley, and the state of Ohio, hosting more than 400 events every year. Over 40,000 patrons attend lectures, exhibits, performances, the Pipino Performing Arts Series, and the Summer Festival of the Arts annually, contributing more than $25 million to our community’s economy.

Alumni Success

Graduates of Cliffe College enjoy fulfilling and broadly diverse careers as visual and performing artists, as well as employment with entities such as the Metropolitan Opera, NBC, Talon International, the Opry Band, Disney, ABC, multiple military ensembles, and in hundreds of university and school classrooms across the country. Our highly accomplished alumni have received Grammy Awards, Purchase Prize (Sculpture), Nashville Songwriters Hall of Fame induction, ASCAP awards, and others.

Additional Degree Requirements

High School Preparation

In the Undergraduate Catalog under Admissions, please refer to the "New Freshman Applicants (https://catalog.ysu.edu/undergraduate/general-information/admission/new-freshman-applicants/)" page.

All incoming music majors need sufficient musical performance ability to undertake college-level music courses. Voice majors will benefit from taking French, German, and/or Italian in high school.

Requirements for the BFA, BM, and BA Degrees

<table>
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<tr>
<th>Basic Skill Courses (See &quot;General Education Requirements&quot; under &quot;Academic Policies and Procedures&quot; in the Undergraduate Catalog)</th>
<th>BFA</th>
<th>BM</th>
<th>BA</th>
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<tr>
<td>ENGL 1550 &amp; ENGL 1551 (Writing 1 &amp; 2)</td>
<td>6</td>
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<tr>
<td>MATH 2623</td>
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<td>CMST 1545</td>
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<tr>
<th>Domain Courses (See &quot;General Education Requirements&quot; under &quot;Academic Policies and Procedures&quot; in the Undergraduate Catalog)</th>
<th>BFA</th>
<th>BM</th>
<th>BA</th>
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<tr>
<td>Arts &amp; Humanities</td>
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<tr>
<td>Social Sciences</td>
<td>6</td>
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Natural Sciences (includes one lab science) 7 7 7

Social & Personal Awareness 6 6 6

Foreign Language 0-16 0-8

1 For the Institutional Report on the Quality of Teacher Preparation, Title II, Higher Education Act, please see Title II, Teacher Education of this Undergraduate Catalog.

2 Students must complete the equivalent of intermediate study (2600) in one language. For information about the Foreign Language Placement Test, consult the Department of World Languages and Cultures (https://catalog.ysu.edu/undergraduate/colleges-programs/college-liberal-arts-social-sciences/department-foreign-languages-literatures/).

Professional Courses

These courses are listed under the appropriate department or school curricula.

Additional Degree Requirements

- Upper-division status (including completion of any specified preparatory units lacking at entrance)
- Major and minor requirements (not all programs require a minor)
- Course-level requirements
- GPA requirement
- Residency requirement
- Completion of semester hours required for the degree
- Application for graduation

Courses of Instruction

Course descriptions may be found in a separate section in the Undergraduate Catalog (https://catalog.ysu.edu/courses/).

For more information, visit The Cliffe College of Creative Arts (p. 255).

Department of Art

Introduction

YSU's Department of Art is a leader in Northeast Ohio in preparing students for the challenges that today’s rapidly changing world presents. In a highly immersive, productive environment and through an intensive and holistic curriculum, art students develop technical and conceptual skills from introductory through advanced specialized courses – all focused on collaborative engagement, critical thinking, and creative problem-solving.

Within the fields of both Studio Art and Art Education, YSU’s Department of Art cultivates life-long skills with proven results that may be seen in our impressive, wide-ranging job placement record and in the personal satisfaction of our graduates. YSU’s Department of Art continues to build itself as a progressive platform for collaborative and interdisciplinary ways of learning – fostering independent, creative thinkers who are nimble and adaptable to a vast array of situations and conditions.

Welcome from the Chair

Welcome to the Department of Art at Youngstown State University! YSU has a legacy of education in the visual arts that stretches back to the 1920s and now hosts an art department accredited by the National Association of Schools of Art and Design. The intimate size of our programs guarantees students one-on-one interaction with their professors. The department is housed in Bliss Hall,
and our facilities feature 70,000 square feet of studio spaces, media labs, and exhibition spaces filled with state-of-the-art equipment, from large state-of-the-industry printers to dozens of ceramics kilns. The Department of Art also administers the McDonough Museum of Art and enjoys collaborative relationships with our close neighbors, the Butler Institute of American Art and the Butler Art Museum.

As a student, you could engage in media-driven disciplines such as digital media, graphic + interactive design, or photography. You could also choose to pursue more traditional media like ceramics, painting, printmaking, or sculpture. Also, the Interdisciplinary Studio Arts track, which allows students to work in several areas simultaneously, is a great way to engage in a cross-disciplinary approach. Alternatively, you could decide that sharing your enthusiasm for art with others might be your passion and opt to become an art educator.

No matter the path you choose, you will have enthusiastic, active, and talented faculty to guide you on your way. Our professors also encourage study abroad programs, which includes an opportunity to study in Glasgow, Scotland. In addition, you may join one of our active student organizations to share creative synergy with your peers. We have everything in place for you to come to YSU and achieve an excellent visual arts education.

We are ready to answer any questions you might have. If you would like to have further conversations with faculty members, arrange a tour, or get an answer to a specific question, please do not hesitate to reach out to us at the numbers listed below in the Contact Information section.

Best,
Joy Christiansen Erb
Professor and Chair
Department of Art
P 330.941.3627
jchristiansenerb@ysu.edu

Contact Information
To learn more about the degree programs, scholarships, exhibitions, faculty, and students, please visit art.ysu.edu or contact the Department of Art directly at 330-941-3627. To schedule a personalized campus visit, contact the Cliffe College Coordinator of Admission and Recruitment at 330-941-2346.

Email: Connect Form
Department of Art
1 University Plaza
Youngstown, OH 44555
P 330.941.3627
F 220.941.7183

Learning Outcomes
1) Students will be able to demonstrate their proficiency of art vocabulary.

2) Students will be able to demonstrate technical expertise appropriate to their progression in the program relevant to their chosen artistic medium.

3) Students will be able to demonstrate a high level of content expression appropriate to their progression in the program relevant to their chosen artistic medium.

Mission Statement
The mission of the Department of Art at Youngstown State University is to provide a teaching and learning environment for the development of skills, concepts, and sensitivities essential to professional artists, designers, art educators, and art historians. This mission and the cultural enrichment that it entails are directed at the entire student body and the community as a whole. This mission is accomplished within the context of a local multicultural society, thereby demanding a special concern for the dissemination and sensitivity to a wide cultural heritage.

Degree Information & Requirements
The Department of Art offers courses that satisfy major requirements in art for the degrees of:

- Bachelor of Fine Arts
- Bachelor of Science in Education

Studio art includes concentrations in 3-Dimensional Studies (sculpture/ceramic), Digital Media, Graphic + Interactive Design, Interdisciplinary Studio Arts, Painting and Printmaking, and Photography.

The requirements for curricula and for graduation are in accordance with the published regulations of the National Association of Schools of Art and Design (NASAD (https://nasad.arts-accredit.org/)).

In the Bachelor of Fine Arts degree, the programs in studio art are designed to familiarize the student with the basic concepts in art and the language of visual form. Concentration is on the development and involvement of the student with the processes and practices of art. After the foundation sequence, passing ART 1503 Foundation Portfolio Review (usually spring term of the freshman year) is required to continue in the program. Also, BFA students are required to exhibit in a senior show at the John J. McDonough Museum of Art.

Students who wish to qualify for PK-12 licensure are expected to complete a minimum of 54 semester hours of art education degree requirements, at least 12 of them in art history, 15 in professional education courses, and 27 in art education core classes, which include student teaching practicum. After completing two years of study with a grade point average of 3.0, these students may apply for upper-division status in Cliffe College to begin their professional education courses. (Other requirements for admission are listed under the Cliffe College webpage.) No minor is required for the special certificate.

To transfer into a Department of Art degree program, a minimum GPA of 2.5 is required. Studio art credit for transfer students is awarded based on a combination of portfolio work and prior college credit. Except for state-mandated transfer courses, transfer credit is not awarded solely on a listing of courses on a transcript. Transfer students should make an appointment to show their portfolios. For more information regarding transferring into the Department of Art, visit Transfers.

Facilities
The state-of-the-art facilities include over 70,000 square feet of dedicated studio and exhibition space for students to develop their craft. The clean and well-equipped studio facilities offer a broad range of high-quality equipment that includes traditional to emerging technologies. Digital technology includes several digital labs with industry standard Macintosh computers utilizing software (Adobe Creative Suite, Rhinoceros 3D, open-source creative coding platforms) and hardware (3D digital printers, laser cutters, CNC mills, large format photographic printers and scanners). Traditional facilities and equipment include a foundry for metal casting, a welding fabrication area, a wood shop, a range of printing presses, photo/digital-based printmaking

...
equipment, ceramic potter’s wheels, kilns, an analog darkroom, medium and large format cameras, studio lighting, and portable backdrops.

The McDonough Museum of Art (https://ysu.edu/mcdonough-museum/) is directly adjacent to Bliss Hall on the YSU campus. The Beecher Center (http://cac.ysu.edu/beecher/), a joint-use space for the University, and the Butler Institute of American Art (https://butlerart.com/), are located just across Wick Avenue from Bliss Hall.

Student Activities
Art students may participate in all Youngstown State University student activities. Of special interest to art students are student organizations and activities such as:

- AIGA Student Chapter (American Institute of Graphic Arts)
- Empty Bowls Fundraiser
- F(10) Photography Club
- Red Press Collaborative
- Student Art Association
- Study Abroad Trip to Glasgow, Scotland
- Youngstown Design Works

Academic Advising
The Cliffe College Academic Advisement Office strives to provide optimum assistance to our students to help them achieve academic and future career success. Our services include individual academic advisement sessions, updated curriculum guides, updated admissions and transfer requirements, ongoing graduation guidance, career development, and more. Our goal is to see you succeed in your academic and career endeavors! Shannon Holdridge is the Academic Advisor for Art students. She may be reached at 330-941-3728 or smholdridge@ysu.edu (%73%6d%68%6f%6c%64%72%69%64%67%65%40%79%73%75%2e%65%64%75).

Accreditation
The Department of Art is accredited by the National Association of Schools of Art and Design (NASAD (https://nasad.arts-accredit.org/)) and the Council for the Accreditation of Educator Preparation (CAEP (http://www.ncate.org/)) through meeting the rigorous standards set by each organization. YSU is one of 363 accredited conservatories, colleges, and universities recognized by NASAD. The Department of Art was reviewed by NASAD in 2016, and the next campus visit is scheduled for 2026. For more information regarding NASAD accreditation, visit NASAD (https://nasad.arts-accredit.org/).

Art Career Possibilities
Advertising Consultant or Designer • Advertising Illustrator • Animator • Apparel Graphic Designer • Architectural Blacksmith • Architectural Illustrator • Architectural Photographer • Art Advisor • Art Appraiser • Art Buyer • Art Consultant • Art Critic • Art Director • Art Educator • Art Fabricator • Art Historian • Art Journalist • Art Publicist • Art Therapist • Author • Backdrop Designer • Billboard Artist • Brand Manager • CAD Designer • Caricaturist • Cartographer • Cartoonist • Ceramic Artist • Ceramic Designer • Commercial Artist • Commercial Photographer • Community Activist • Community Artist • Community Arts Instructor • Concept Illustrator • Conservator • Corporate/Public Relations Photographer • Digital Consultant • Digital Fabrication • Digital/New Media Artist • Ceramic Mold Maker • Ceramic Production Designer • Creative Director • Curator • Design Consultant • Digital Designer • Display Designer Commercial • Display Designer Retail • Documentarian • Draftsman • Editor • Editorial/Illustration Photographer • Environmental Graphic Designer • Exhibit Preparator • Fashion Illustrator • Fashion Photographer • Fiber Artist • Fine Art Photographer • Gallery Director/Owner • Graphic Designer • Graphic Novelist • Illustrator • Image Processor • Information Architect • Interactive Media Designer • Installation Artist • Jewelry Designer • Letterpress Printer • Magazine Designer • Marketing Strategist • Master Printer • Medical Illustrator • Metalsmith • Metals Artist • Muralist • Museum Curator • Art/Children’s Museum Educator • Museum Registrar • Museum Staff • Newspaper Graphic Artist • Painter • Performance Artist • Photographer • Photo Editor • Photo Journalist • Photo Re-toucher • Police Sketch Artist • Portrait Photographer • Printmaker • Product/Food Photographer • Production Designer • Prop Fabricator • Professor • Public Artist • Renderer • Sculptor • Set Decorator • Set Designer • Social Media Manager • Storyboard Artist • Studio Artist • Stylist • Surface Print Designer • Tattoo Artist • Technical Illustrator • Textile Designer • Video Artist • Videographer • Web Designer • Web Developer • Wedding Photographer • Wood Artist • Wood Worker

History
The Department of Art at Youngstown State University began in 1935 as an initiative of Howard Jones, the first president of the University. He supported the concept that aesthetics and art play a major role in the development of the individual in society. Howard Jones appointed Margaret Evans, former director and curator of the Butler Institute of American Art (https://butlerart.com/), to teach and direct the development of art courses in the curriculum. Evans began to establish a curriculum leading to a career in art education in elementary and secondary schools. During this period of development, art classes were held at the Butler Institute of American Art, the Mill Creek Park (https://www.millcreekmetroparks.org/) art museum and various locations on the campus, ranging from private mansions along Wick Avenue to the World War II army barracks built on the campus.

Since 1935, the department has grown to over 20 faculty members who teach more than 200 art majors studying drawing, painting, printmaking, photography, ceramics, sculpture, digital media, graphic design, interdisciplinary studio, art history, and art education.

Chair
Joy Christiansen Erb, M.F.A., Professor, Chair
Professor
Samuel Adu-Poku, Ph.D., Professor
Claudia A. Berlinski, M.F.A., Assistant Professor
Dragana Crnjak, M.F.A., Professor
Joseph D’Uva, M.F.A., Associate Professor
Johnathan Farris, Ph.D., Assistant Professor
Richard Helfrich, M.F.A., Assistant Professor
Lillian L. Lewis, Ph.D., Assistant Professor
Missy McCormick, M.F.A., Associate Professor
Christine E. McCullough, M.F.A., Professor
Michelle Nelson, M.F.A., Professor
Jonathan Dana Sperry, M.F.A., Associate Professor

Majors
- Bachelor of Science in Education Visual Arts Pre-K to 12 (p. 277)
- Bachelor of Fine Arts
  - Studio Art 3-Dimensional Studies Emphasis (p. 267)
  - Studio Art Digital Media Emphasis (p. 265)
  - Studio Art Graphic + Interactive Design Emphasis (p. 269)
• Studio Art Interdisciplinary Studio Arts Emphasis (p. 270)
• Studio Art Painting / Printmaking Emphasis (p. 272)
• Studio Art Photography Emphasis (p. 275)

Minors
• Art History Minor for Studio Art Majors (p. 264)
• Art History Minor for Non-Art Majors (p. 264)
• 3 Dimensional Studies Minor for Non-Art Majors (p. 264)
• Digital Media Minor for Non-Art Majors (p. 280)
• Graphic Design Minor for Non-Art Majors (p. 280)
• Graphic Design Minor for Studio Art Majors (p. 280)
• Interactive Design Minor for Studio Art Majors (p. 281)
• Interactive Design Minor for Non-Art Majors (p. 281)
• Interdisciplinary Art Minor for Studio Art Majors (p. 281)
• Interdisciplinary Art Minor for Non-Art Majors (p. 281)
• Painting Minor for Studio Art Majors (p. 281)
• Painting Minor for Non-Art Majors (p. 281)
• Photography Minor for Non-Art Majors (p. 282)
• Photography Minor for Studio Art Majors (https://catalog.ysu.edu/undergraduate/colleges-programs/college-creative-arts-communication/department-art/photography-minor-art-majors/)
• Printmaking Minor for Studio Art Majors (p. 282)
• Printmaking Minor for Non-Art Majors (p. 282)

ART 1501 Fundamentals of 2D Design 3 s.h.
The fundamental ideas and principles of 2-dimensional form. Emphasis on basic design concepts, pictorial composition, color theory, vocabulary, media and processes. Slide lectures, directed readings and studio problems.

ART 1502 Fundamentals of 3D Design 3 s.h.
Investigation of the interactions between line, plane, mass, and space. Emphasis on basic 3D concepts, color theory, vocabulary, media and techniques. Slide lectures, directed readings, writings and studio problems. Prereq.: ART 1501.

ART 1503 Foundation Portfolio Review 1 s.h.
A mandatory review of work completed in the Freshman Foundation Studio courses for students seeking the BFA in Studio Art degree. Students must pass the review to continue in the program and prior to selecting a concentration. Prereq.: ART 1501, ART 1521 and enrollment in ART 1522 and ART 1502.

ART 1521 Foundation Drawing 3 s.h.
An introduction to basic drawing concepts, materials and methods. Emphasis on observational drawing. Concepts including the effective use of line, mass, volume, composition, space, and the formal principles of design.

ART 1522 Intermediate Drawing 3 s.h.
A continuation of ART 1521 with greater emphasis on process, technique, spatial organization, and the development of pictorial content. Various topics are explored including figure drawing and the use of color. Prereq.: ART 1501 and ART 1521.

ART 1530 Sustainable Design in Practice 3 s.h.
Design in Practice Introduction to the visual and organizational components of two and three dimensional design, development of ideas and creative critical thinking as applied to tangible form. The course leads to an understanding of design as a verb and encourages inventiveness and collaboration to generate ideas. Gen Ed: Environmental Sustainability, Social and Personal Awareness.

ART 1540 Masterpieces of World Art 3 s.h.
An introduction to the ways that art communicates and how art interacts with our environment, our society, and our lives. Rather than a chronological study of the development of art, the course emphasizes the in-depth study of a number of works and issues, drawn from art from throughout the world, both past and present. Intended for non-art majors. Gen Ed: Arts and Humanities, International Perspectives, Social and Personal Awareness.

ART 1541 Survey of Art History 1 3 s.h.
A study of world art, focusing on the western European tradition. Covers the period from prehistoric times through 1500. Introduces key concepts, methods, and vocabulary for the study of art. Gen Ed: Arts and Humanities.

ART 1542 Survey of Art History 2 3 s.h.
A study of world art, focusing on the western European tradition. Covers the period from 1500 to the present. Introduces key concepts, methods, and vocabulary for the study of art. Gen Ed: Arts and Humanities, International Perspectives, Social and Personal Awareness.

ART 1544 Survey of Art History: Body, Gender, and Self 3 s.h.
This course covers the history of world art from the perspective of the human body, issues of gender, and conceptions of self. This course introduces key concepts, methods, and vocabulary for the study of art, and treats a range of artistic media in their historical and cultural contexts. Gen Ed: Arts and Humanities, Domestic Diversity, Social and Personal Awareness.

ART 1555 Introduction to Art Education 3 s.h.
The course provides a foundation to the histories, theories, and practices of art education in PK-12 schools, museums and community centers. Course content will include methods for developing art education curriculum, introduction to teaching strategies, fostering student engagement/classroom management, and developing assessments. Students will complete 15 preclinical hours in art educational sites working with cooperating professional educators to observe and teach. Students will practice methods of digital documentation and reflective practice.

ART 1591 Idea Development and Creativity in Cultural Context 3 s.h.
This course is centered on creative and equitable strategies in idea development and implementation applicable to innovative and collaborative problem solving in diverse fields and the ability to connect these strategies meaningfully to diverse audiences, specifically subcultures and minority groups within the United States. Gen Ed: Domestic Diversity, Social and Personal Awareness.

ART 2611 Introduction to Sculpture 3 s.h.
An introductory course for those who have little or no experience with sculpture. Students explore basic sculptural concepts and theories using a variety of materials and methods. Directed readings, writings, technical workshops, and participation in course work exhibitions required. Prereq.: ART 1503 and ART 1522.

ART 2615 Introduction to Metals 3 s.h.
Basic metals fabrication in the creation of jewelry and small metal objects. Design as applied to hand processes. Prereq.: ART 1502, ART 1522.

ART 2621 Life Drawing 3 s.h.
Students develop sound composition based upon accuracy of observation of the human figure. Understanding of proportion and the detailed study of skeletal and muscular systems will be addressed. Prereq.: ART 1502, ART 1522.

ART 2624 Printmaking for Non-Majors 3 s.h.
A survey of basic printmaking processes; including relief, intaglio, and mono-printing techniques. Emphasis on technical, formal, and conceptual exploration related to each technique.
ART 2625  Introduction to Printmaking: Intaglio and Relief  3 s.h.
An introduction to basic intaglio and relief printmaking processes, including
etching, collagraph, lino-cut, woodcut, and multiple-block printing. Emphasis on
technical, formal, and conceptual issues related to each technique.
Prereq.: ART 1503.

ART 2626  Introduction to Printmaking: Lithography and Screenprinting  3 s.h.
An introduction to basic lithography and screenprinting processes, including
stone and plate lithography and photo-mechanical screen-printing. Emphasis on
technical, formal, and conceptual issues related to each technique.
Prereq.: ART 1503.

ART 2631  Introduction to Ceramics  3 s.h.
Introduction to handbuilding methods, low-fire glaze application, pit firing, and
firing procedures.
Prereq.: ART 1503 and passing the foundation portfolio review, or permission
of instructor.

ART 2640  Ceramics for Non Majors - Handbuilding  3 s.h.
Introduction to the basic building methods, a variety of surfacing techniques,
glaze and electric firing. Class projects will allow students to practice
techniques while developing their personal aesthetic within the realm of
ceramic art.

ART 2641  Ceramics for Non-Majors- Wheel and Alternative Processes  3 s.h.
Introduction to the basic wheel throwing technology, mold making, and slip
casting process. A variety of surfacing techniques, glaze and kiln firing will
be covered. Class projects will allow students to practice techniques while
developing their personal aesthetic within the realm of ceramic art.

ART 2648  Experience Art: Social and Behavioral Perspectives  3 s.h.
An introductory course incorporating art education research methods to
investigate social and behavioral influences on visual art learning. Classic and
contemporary studies of artistic development and aesthetic response will be
introduced. Learning encounters with art from early childhood through late
adulthood will be addressed. Intended for education majors.

Gen Ed: Arts and Humanities.

ART 2650  Introduction to Painting  3 s.h.
This course is designed to introduce students to the fundamentals of painting.
Through a variety of hands-on painting processes, exercises in color theory,
continuous line and surface treatments, variety of painting techniques
and expressive use of the materials, the course will focus on developing
students understanding of painting as critically and visually engaging process.
One hour lecture, 5 hours lab per week.
Prereq.: ART 1503 or permission by instructor.

ART 2653  Watercolor  3 s.h.
Opaque, transparent, and inventive procedures with watercolor. Emphasis on expressive use of the medium and development of personal style.
Prereq.: ART 1503.

ART 2661  Introduction to Graphic Design  3 s.h.
The basic concepts of graphic design theory including layout and organization of
space, the elements of visual communication and the process of
presentation from thumbnails through comprehensives.
Prereq.: ART 1503 and passing the foundation portfolio review.

ART 2670  Photography for Non-majors  3 s.h.
An introduction to fine art photography emphasizing visual literacy and
technical skills for non-art majors. Course content focuses on digital camera
operation, composition and design, lighting, ethics, basic computer editing,
and outsourced printing. Student must provide camera.

ART 2674  Introduction to Photography  3 s.h.
Introduction to black and white digital photographic image capture
emphasizing visual literacy, creative possibilities and critical awareness of
the medium as an art form. Course content focuses on DSLR camera operation,
composition and basic computer editing. A digital SLR camera is required.
Prereq.: ART 1503 or permission of instructor.

ART 2691  Introduction to Digital Media  3 s.h.
This course is designed to give students a technical and theoretical overview
of digital media as a means of personal and cultural expression, strengthening
visual literacy. Students will explore static and dynamic digital methods.
Prereq.: ART 1503 or permission of instructor.

ART 3703  Junior Portfolio Review  1 s.h.
A mandatory review of work within each studio concentration. Students must
pass to continue in the program.
Prereq.: Junior standing.

ART 3712  Intermediate Sculpture  3 s.h.
Examination of sculptural concepts through individual projects. Emphasis is
on contemporary sculptural issues, techniques, and media. Directed readings,
technical workshops and critiques required.
Prereq.: ART 2611.

ART 3713  Advanced Sculpture Studio  3 s.h.
This course continues the examination of contemporary sculptural issues,
techniques and media. Students explore alternative sculptural approaches.
Individual student projects determined by faculty consultation and critiques.
Directed readings, writings, group discussions.
Prereq.: ART 3712 or permission of instructor.

ART 3715  Intermediate Metals  3 s.h.
This course examines the casting process used in creating jewelry and small
metal objects. Emphasis will be on sound craftsmanship and successfully
meeting the design challenges of the metals medium. Slide lecture,
demonstrations, assigned readings and studio problems.
Prereq.: ART 2615.

ART 3721  Expressive Drawing  3 s.h.
Exploration of contemporary drawing practices with a focus on creative
and alternative extensions to traditional image making. Emphasis placed
on the development of perceptual, conceptual, and interpretive solutions to
drawing problems and the relationship of technique, scale, media, format and
materials. Articulation of personal content, research and revision is stressed.
Prereq.: ART 1522.

ART 3722  Interdisciplinary Art Practice  3 s.h.
Investigation of experimental, collaborative and interdisciplinary art practice-
extending outward to include a variety of creative fields; including technology.
Projects challenge students to redefine traditional approaches to art making
utilizing concepts, processes and performative actions inherent to drawing in
a wide context of materiality, surface, space, site-specific, collaborative and
ephemeral methodologies. May be repeated a total of two times for 6 semester
hours.
Prereq.: Two of the following ART 2625, ART 2626, ART 2611, ART 2674,
ART 2691, ART 2669.

ART 3725  Intermediate Printmaking  3 s.h.
Further exploration of intaglio, relief, lithography and screenprinting processes,
including digital and photo-mechanical processes. Emphasis on refining
technique, experimentation, and further development of concept through the
study of historical and contemporary printmaking artists.
Prereq.: ART 2625 or ART 2626.

ART 3732  Intermediate Ceramics  3 s.h.
Continuation of handbuilding methods; introduction to wheel-thrown ceramics.
Prereq.: ART 2625.

ART 3733  Advanced Ceramics  3 s.h.
Emphasis on clay as a means of personal expression through handbuilt and
wheel-thrown ceramics.
Prereq.: ART 3732.

ART 3737  Pre-K-4, Visual Arts Education  3 s.h.
Cognitive and interdisciplinary arts activities for multiple age levels to meet
the developmental needs of learners at diverse ages. Curriculum development,
long- and short-range planning, motivational procedures, assessment
processes, field-based activities.
Prereq.: Junior standing (63 s.h.).
ART 3741  Topics in Medieval Art  3 s.h.
Topics in European Art from the beginnings of Christianity through the Gothic period (500 and 1500 A.D.). Specific content varies by semester and may include a general survey of Medieval art, or in-depth topics such as Early Christian and Byzantine art or Medieval sculpture. May be taken twice for credit if content differs.
Prereq.: ART 1541 or consent of instructor.

ART 3742  Topics in Renaissance Art  3 s.h.
The art and architecture of Europe during the 15th and 16th centuries. Examines the work of Michelangelo, Leonardo da Vinci, Durer, and others. Topics vary by semester and include the Renaissance in Italy and the Renaissance in Northern Europe. May be repeated if the content is different.
Prereq.: ART 1542 or consent of instructor.

ART 3743  Baroque and Rococo Art  3 s.h.
Art and architecture of the 17th and early 18th centuries, an era of world exploration and scientific investigation. The works of such artists as Bemini, Velazquez, and Rembrandt are included.
Prereq.: ART 1542 or consent of instructor.

ART 3744  Seventeenth and Eighteenth Century American Art  3 s.h.
Covers all aspects and media of painting, sculpture, architecture, and the decorative arts of 17th and 18th centuries.
Prereq.: ART 1542 or consent of instructor.

ART 3745  Nineteenth Century European Art  3 s.h.
European painting and sculpture of Neo-classicism, Romanticism, and Realism. Include Impressionism and related movements. Art as part of social and political developments, and the foundations of modern formalism.
Prereq.: ART 1542 or consent of instructor.

ART 3746  Nineteenth Century American Art  3 s.h.
Covers all aspects and media of painting, sculpture, architecture and the decorative arts of the 19th century.
Prereq.: ART 1542 or consent of instructor.

ART 3747  African-American Art  3 s.h.
A survey of Black American art history from the 17th century through the 20th century.
Prereq.: AFST 2601 or ART 1541 or ART 1542, or consent of instructor.

ART 3748  Special Topics in Studio Art  3 s.h.
Study in one of the many areas of the visual process that focuses on specific content or technical methods.
Prereq.: ART 1503 or consent of instructor.

ART 3752  Intermediate Painting  3 s.h.
An understanding of painting processes in relation to both historical and contemporary painting practices. Students will be introduced to a variety of materials, processes and techniques for a diverse investigation of painting practice with concentration on individual content, direction, style, and personal expression.
Prereq.: ART 2650.

ART 3757  Art Education for Diverse Populations  3 s.h.
Students will explore issues of cultural diversity, individuals with exceptionalities and gifted learners, gender differences, and differences in socioeconomic backgrounds, and how these affect student learning and behavior in the classroom. Students will be challenged to apply their understanding of the needs of all learners and knowledge of the richness of contributions from diverse populations, to develop inclusive and pluralistic curricular in art education.
Prereq.: ART 1555 or permission of instructor.

ART 3759  Interactive Design  3 s.h.
An investigation of the aesthetic and practical processes, philosophies, and history behind the field of interactive design for on screen applications. Students employ various hardware/software tools available to designers for visual interactive design.
Prereq.: ART 2661.

ART 3760  Typography  3 s.h.
An Investigation of typographic design within a system over a variety of formats with a focus on a technical understanding of the principles of typography, including classification, legibility, readability, use of a grid, alignment, mood, audience and visual hierarchy as well as an understanding of typography as an art form.
Prereq.: ART 2661 or permission of instructor.

ART 3761  Intermediate Graphic Design  3 s.h.
The interaction of type and images in visual communication. Students will be introduced to typographic grid as an organizing principle as well as the relationship of form to content.
Prereq.: ART 3760 or permission of instructor.

ART 3762  Advanced Typography  3 s.h.
The development of sensitivity for specific typefaces and their effective use in communications. Emphasis will be directed toward the expressive use of type in interpretive, symbolic, and metaphorical solutions.
Prereq.: ART 3703 and ART 3761 or by the permission of instructor.

ART 3763  Illustration  3 s.h.
Visual expression through various media, both electronic and traditional. Emphasis is on problem-solving through the exploration of technique, creative process and the development of personal styles.
Prereq.: ART 1503.

ART 3764  Typeface Design  3 s.h.
An investigation of typeface design. Students will engage in developing one or more unique typefaces, and the promotional materials used to market them. Students will engage in research related to the history of type design, and current type trends and cultural inspirations.
Prereq.: ART 2661 or by the permission of instructor.

ART 3765  Motion for Interactive Design  3 s.h.
An Investigation of motion for interface/web design. Students will engage current technologies to create dynamic motion for screen-based design.
Prereq.: ART 3703 and ART 3761 or permission by instructor.

ART 3768  Pre-Press Production  3 s.h.
Introduction to the technical requirements of preparing a design for production including the importance of understanding pre-press software, printing technology and printing specifications.
Prereq.: ART 2661.

ART 3769  Intermediate Interactive Design  3 s.h.
A further investigation of interactivity/screen design. Students will encounter projects ranging from web design to interactive screen-based publications.
Prereq.: ART 3759.

ART 3771  Analog Photography 1  3 s.h.
Introduction to photographic analog printing emphasizing photography as an expressive art form. Course content focuses on lighting, film development and black and white enlargement and printing. 3 s.h.
Prereq.: Art 2674 or ART 2671.

ART 3772  Digital Photography 1  3 s.h.
Introduction to color digital still photography utilizing the computer as a fine art tool. Course content focuses on retouching, image manipulation, color management and high quality printing.
Prereq.: ART 2671 or ART 2674.

ART 3780  African Art  3 s.h.
Study of African tribal art forms and their relationship to the historical period in which they were created. The impact and influence of African art on the development of contemporary Western art trends.
Prereq.: AFST 2601 or ART 1541 or ART 1542, or consent of instructor.

ART 3781  Native North American Art  3 s.h.
The art and architecture of the native peoples of North America. Includes archeological sites and living artistic traditions, stressing the relationship between art and society.
Prereq.: ART 1542, a course in cultural anthropology, or consent of instructor.
ART 3782  Topics in Pre-Columbian Art  3 s.h.
The art and architecture of the ancient peoples of Mexico, Central and South America. Topics vary by semester, and include Mesoamerica (Mexico and northern Central America) and the Andes (Peru and Bolivia). May be taken twice if the content is different.
Prereq.: ART 1541, a course in cultural anthropology, or consent of instructor.

ART 3783  History and Theory of Graphic Design  3 s.h.
A chronological survey of graphic design from ancient to modern times. An emphasis on critical visual theory, specific designers who influenced the field as well as the relationship between visual communication and historical/cultural events.
Prereq.: ART 1542 or permission by instructor.

ART 3784  Art of China  3 s.h.
The art of China from prehistory to the present day. Media including ceramics, stone carving, bronzes lacquer, wood, architecture, painting, and new media will be placed in cultural, religious, political and social contexts.
Prereq.: ART 1541 or ART 1542 or ASST 1550.

ART 3785  Art of Japan  3 s.h.
Japanese art from prehistory to the present including ceramics, bronzes, lacquer, wood, architecture, painting, photography and new media. Emphasis will be placed on putting works into cultural, religious, political, and social context.
Prereq.: ART 1541 or ART 1542 or ASST 1550.

ART 3788  Theory of Art  3 s.h.
The theories and philosophical implications of form in the visual arts, with emphasis on contemporary thought.
Prereq.: ART 1541, ART 1542, and junior standing.

ART 3789  Arts of South and Southeast Asia  3 s.h.
Arts of greater India and both maritime and mainland Southeast Asia from prehistoric to contemporary, including ceramics, stone carving, architecture, painting, and photography in their cultural, religious, political and social context.
Prereq.: ART 1541 or ART 1542 or ASST 1550.

ART 3792  Video Art  3 s.h.
This course introduces video as an expressive form of communication ranging from narrative to non-narrative structures. Students will gain technical knowledge by working individually and in small teams on pre-production, production and post-production.
Prereq.: ART 2691 or permission of instructor.

ART 3794  Introduction to Motion Studies  3 s.h.
An introductory study of time-based motion graphics including traditional and two-dimension (2D) computer animation. Principles and techniques of motion graphics from storyboarding to digital composition. Discussion of exemplary works, historical background, and technological trends in motion graphics.
Prereq.: ART 2691.

ART 3795  Advanced Digital Audio/Video Production  3 s.h.
A project-oriented advanced study in digital audio/video production. A forum for further study of methods, procedures, and results attainable with video editing software, advanced editing techniques, digital compositing, and titling software.
Prereq.: ART 3792 or permission of instructor.

ART 3796  Ideation  3 s.h.
This course focuses on learning about and practicing creative strategies that improve communication of content and ideas. While emphasis will be on strategies related to digital culture, outcomes can be in digital or non-digital mediums. This course is studio based with additional emphasis on reading, writing and discussion of related topics.
Prereq.: ART 2691.

ART 3797  Web as Art  3 s.h.
An introduction to web authoring within art context emphasizing the development of a creative and critical artistic practice while covering practical technical skills in web authoring.
Prereq.: ART 2691.

ART 4800  Studio Problems  1-3 s.h.
Advanced, independent study in any two- or three-dimensional studio discipline. May be repeated for a maximum of 9 s.h.
Prereq.: Senior standing and/or permission of instructor.

ART 4800A  Studio Problems Ceramics  1-3 s.h.
Advanced, independent study in any two- or three-dimensional studio discipline. May be repeated for a maximum of 9 s.h.
Prereq.: Senior standing and/or permission of instructor.

ART 4800B  Studio Problems Digit Imaging  1-3 s.h.
Advanced, independent study in any two- or three-dimensional studio discipline. May be repeated for a maximum of 9 s.h.
Prereq.: Senior standing and/or permission of instructor.

ART 4800E  Studio Problems Photography  1-3 s.h.
Advanced, independent study in any two- or three-dimensional studio discipline. May be repeated for a maximum of 9 s.h.
Prereq.: Senior standing and/or permission of instructor.

ART 4800F  Studio Problems Printmaking  1-3 s.h.
Advanced, independent study in any two- or three-dimensional studio discipline. May be repeated for a maximum of 9 s.h.
Prereq.: Senior standing and/or permission of instructor.

ART 4800J  Studio Problems Interdisciplinary  1-3 s.h.
Advanced, independent study in any two- or three-dimensional studio discipline. May be repeated for a maximum of 9 s.h.
Prereq.: Senior standing and/or permission of instructor.

ART 4801  Interdisciplinary Studies in the Visual Arts  1-4 s.h.
Interdisciplinary courses developing areas of self-interest using the most suitable range of visual strategies, media and methods of artistic production. Students select faculty from different visual disciplines to form team of two mentors. Directed readings, structured research initiatives and individual projects. Experience in selected disciplines required.
Prereq.: ART 3703.

ART 4801J  Inter Std Visual Arts Interdis  1-4 s.h.
Interdisciplinary courses developing areas of self-interest using the most suitable range of visual strategies, media and methods of artistic production. Students select faculty from different visual disciplines to form team of two mentors. Directed readings, structured research initiatives and individual projects. Experience in selected disciplines required.
Prereq.: ART 3703.

ART 4802  Senior Project  3 s.h.
A studio concentration intended as preparation and production of work for the Senior Show graduation requirement.
Prereq.: Senior status and permission of instructor.

ART 4803  Senior Seminar  3 s.h.
Capstone course for studio majors integrating writing, oral, and critical reasoning skills specific to the student's discipline within the larger framework of the visual arts.
Prereq.: Senior standing in Art.
Gen Ed: Capstone.

ART 4805  Urban Internship in Art  3 s.h.
This internship opportunity is open to any qualified studio art, art history or art education students. Interns work in galleries, art centers or an approved community art entity. Competitive and based on GPA, interview and portfolio. May be repeated in different locations up to three times.
Prereq.: Senior standing.

ART 4824  Advanced Printmaking  3 s.h.
Advanced study to include individual technical and conceptual research, refinement of technique utilizing a variety of printmaking processes, development of personal imagery through a portfolio of work. Emphasis on invention and concept development. Repeatable to 9 credit hours.
Prereq.: ART 3725 or ART 3726.
ART 4834 Advanced 3D Studies 3 s.h.
Advanced students work on individual projects determined through discussions with and critiques by faculty. Emphasis is on personal aesthetic development, mainstream art issues, interdisciplinary approaches, and refinement of technical skills. Directed readings, writings, group discussions.
Prereq.: ART 3713 and ART 3733, or permission of instructor.

ART 4837 Professional Practices in Middle School 3 s.h.
An exploration of middle school multiarts teaching strategies including observation, presentation, assessment and lesson planning. Direct observation included.
Prereq.: ART 3737.

ART 4838 Professional Practices in Secondary School 3 s.h.
An exploration of secondary school multiarts teaching strategies including observation, presentation, assessment and lesson planning. Direct observation included.
Prereq.: ART 3737.

ART 4839 Seminar in Art Education 3 s.h.
Discussions of emerging critical issues and topics of interest in art education including problems of the prospective teacher involving plant facilities, budget and supplies, professional dispositions, ethics, and state mandated licensure exams. Candidates' plan and display student works on campus. As a culminating experience, the teacher candidate will assemble and present a comprehensive professional portfolio in preparation for a job search and/or graduate school. Prereq. or.
Prereq.: ART 3737.
Coreq.: ART 4837 or ART 4838.

ART 4842A Student Teaching Seminar for Art Education 2 s.h.
Seminar topics are based on research and theory related to art pedagogy, classroom management, cultural bias, academic language, differentiation, collaboration, and reflection. Examination of OSTP standards, NASAD standards and professional ethics.
Prereq.: Upper-division status in the art education program, passing scores on OAE music content and OAE Assessment of Professional Knowledge tests, criminal background check, and completion of art education requirements excluding student teaching and art education seminar.
Coreq.: ART 4844, ART 4839.

ART 4844 Supervised Student Teaching: Art (K-12) 10 s.h.
Sixteen weeks supervised student teaching experience in visual arts education. Prereq. Passing scores on OAE exams, BCI/FBI background check, BCOE upper-division status.
Coreq.: ART 4842A, ART 4839.

ART 4851 Advanced Painting 3 s.h.
Development of a strong painting portfolio through studio practice, forming of personal language, critical thinking in research and individual painting methodologies. The course covers professional development strategies including research, proposals writing, exhibiting and promoting students' artwork. One hour lecture and five hours lab per week.
Prereq.: ART 3752.

ART 4861 Publication Design 3 s.h.
The use of type and visual elements in publication formats including newspaper design, newsletters, magazines, annual reports, book design and specialty publications.
Prereq.: ART 3703 and ART 3761.

ART 4863 Corporate Identity Systems 3 s.h.
The development of logos and their applications within an identity system. How corporate signatures are the fulcrum of an identity program and how its systemic usage impacts on the corporate image.
Prereq.: ART 3703 and ART 3761 or by the permission of instructor.

ART 4864 Package Design 3 s.h.
The application of graphic design concepts to three-dimensional problems in the creation of packaging design. Students will consider form, visual impact, and environmental concerns related to the creation of packaging.
Prereq.: ART 3703 and ART 3761 or by the permission of instructor.

ART 4865 Advertising Graphics 3 s.h.
The use of graphic elements in conjunction with type to produce advertisements for many different venues.
Prereq.: ART 3761 or permission of instructor.

ART 4867 Graphic Design Internship 3 s.h.
An application of graphic design theory and practices within a professional work experience. Students are selected on the basis of preparation, portfolio, GPA, and competitive interview. Enrollment is contingent upon the availability of internship positions.
Prereq.: ART 3703 and ART 3761.

ART 4868 Graphic Design Practicum 3 s.h.
Students will work with faculty members, and a real world client to produce promotional materials from concept to print. This course will offer a full service design firm-to-client experience that will allow the student to engage in all levels of the creative/production process.
Prereq.: Permission of instructor.

ART 4869 Advanced Interactive Design 3 s.h.
Continued investigation of interactivity/screen design. Students will engage in developing a more specific and individualized body of work in the area of web design or interactive screen-based publications. One hour lecture and 5 hours lab per week.
Prereq.: ART 3703 and ART 3761 or permission by instructor.

ART 4871 Analog Photography 2 3 s.h.
An exploration of concepts and techniques in traditional analog fine art photography. Course content includes medium and large format films, advanced black and white printing and lighting techniques.
Prereq.: ART 2676 or ART 3771, or ART 2672 and ART 2673.

ART 4872 Digital Photography 2 3 s.h.
An exploration of concepts and techniques in digital fine art photography. Course content focuses on advanced image manipulation, lighting skills, large-scale printing and conceptual development.
Prereq.: ART 2675 or ART 3772, or ART 2672 and ART 2673.

ART 4873 Advanced Photography 3 s.h.
Advanced study of fine art photography exploring conceptual development and creative expression through individual projects. Course content focuses on project development, refinement of technical skills, reading and writing assignments. May be repeated a total of three times.
Prereq.: Passing of ART 3703 or permission of instructor.

ART 4874 Photography Internship 3 s.h.
Application of photographic knowledge and skills in the professional work environment. Admission based on preparation, portfolio, GPA, competitive interview, and the availability of internship locations.
Prereq.: ART 3776.

ART 4880 Special Topics in Art History 3 s.h.
Study in one of the many areas of art history. May be taken for up to three times for credit if the topic is not repeated.
Prereq.: ART 1541, ART 1542, or consent of instructor.

ART 4884 Museum Internship 3 s.h.
Practical experience in the museum working with the professional staff of The Butler Institute of American Art and/or other museums of the region. Students observe and assist in virtually every phase of museum operations from care of the collections through exhibition design and implementation. May be repeated up to three times.
Prereq.: ART 4883.

ART 4889 Seminar in Art History 3 s.h.
A seminar on problems in art history. Topics will be drawn from all periods and media. May be repeated with different topics up to 9 s.h.
Prereq.: Senior standing, 6 s.h. of art history, or consent of instructor.
Gen Ed: Capstone.
ART 4891  Multimedia Design  3 s.h.
Exploration of non-linear digital presentation involving compilation of still and moving images, live video, text, and sound. An overview of multimedia in the fields of web design, interactive programming and onscreen visual communication.
Prereq.: ART 2691.

ART 4893  Advanced Digital Media Studio  3 s.h.
Advanced students work on individual projects in guidance with faculty through directed readings, writings, group discussions and critiques. While refinement of technical skills is essential, emphasis is placed on experimentation, critical thinking and manipulation of the aesthetic experience. (May be repeated up to 12 s.h.).
Prereq.: ART 3792, or ART 3796, or ART 3797 or permission of instructor.

ART 4894  Topics in Digital Imaging  3 s.h.
This advanced level course provides an opportunity for the student to focus on one of the following areas of digital imaging: 2D imaging, 3D modeling, animation, video, or multimedia design. The student completes an independent project, meeting with the instructor on a weekly basis.
Prereq.: ART 2691.

ART 4896  Art and Technology Internship  3 s.h.
An application of theories and practices in the field of art and technology within a professional work environment. Admission is based on preparation, portfolio, GPA, competitive interview, and the availability of internship location.
Prereq.: ART 2691.

ART 5840  Topics in Ancient Art  3 s.h.
The art and architecture of the ancient cultures of the Mediterranean region and the Near East. Topics vary by semester, and include Egypt, the Ancient Near East, Greece, and Rome. May be taken twice if content is different.
Prereq.: Junior standing.

ART 5881  Twentieth Century Art to 1960  3 s.h.
A survey of the visual arts history of the 20th century beginning with its 19th century roots. The influential artists, movements, and motivating theories will be covered against a backdrop of world events. Primary emphasis is placed upon French Impressionism, German Expressionism, Fauvism, Surrealism, and American Abstract Expressionism.
Prereq.: ART 1542 or permission of instructor.

ART 5882  Twentieth Century Art from 1960  3 s.h.
A survey of the visual arts history of the late 20th century beginning with those ideas and trends which followed Abstract Expressionism. Beginning with the late 1950s every principle artistic movement from Pop through post-Modernism will be explored against a backdrop of Post-War world events.
Prereq.: ART 1542 or permission of instructor.

Minor in 3-Dimensional Studies for Art Majors

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<tr>
<th>COURSE</th>
<th>TITLE</th>
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<tbody>
<tr>
<td>ART 3712</td>
<td>Intermediate Sculpture</td>
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<tr>
<td>ART 3713</td>
<td>Advanced Sculpture Studio</td>
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<tr>
<td>ART 3732</td>
<td>Intermediate Ceramics</td>
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<td>ART 3733</td>
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<tr>
<td>ART 2615</td>
<td>Introduction to Metals</td>
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<td>ART 3715</td>
<td>Intermediate Metals</td>
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<td>ART 4834</td>
<td>Advanced 3D Studies</td>
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<tr>
<td>ART 4800</td>
<td>Studio Problems</td>
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<tr>
<td><strong>Total Semester Hours</strong></td>
<td><strong>18</strong></td>
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</tbody>
</table>
Bachelor of Fine Arts in Studio Arts
Digital Media Track

Digital Media Faculty
Dana Sperry (http://art.ysu.edu/dana-sperry/)
Associate Professor
Phone: 330.941.3627
E-mail: jdsperry@ysu.edu

Digital Media
The Department of Art's Digital Media program teaches students to use the creative tools of tomorrow. Within the Digital Media program, you'll explore the ways in which new technologies are engines of personal exploration and cultural production. You'll experiment with new ways of expressing yourself through video, interactive media, and digital fabrication. You will discover that technology is a tool for creative experimentation, an instrument for the artistic manipulation of data, and the creation of dynamic user experience and interaction. The skills you acquire in Digital Media will prepare you for careers in a variety of cultural industries.

Potential areas of exploration in YSU’s digital media program include Video, Web-based Art, 3D Printing and Digital Fabrication, and Creative Coding. Our computer labs feature Mac workstations with the full Adobe Creative Cloud Suite including Photoshop, After Effects, and Premiere, as well as Rhinoceros 3D, and open-source creative software such as Processing and Arduino. Our fabrication labs feature digital tools including 3D printers, CNC routers, and laser cutters.

Contact Information for Department of Art
To learn more about the degree programs, scholarships, exhibitions, faculty, and students, visit art.ysu.edu (http://artdept.ysu.edu/) or contact the Department of Art directly at 330-941-3627. To schedule a personalized campus visit, contact the Cliffe College Coordinator of Admissions and Recruitment at 330-941-2346.

Email: Connect Form (http://art.ysu.edu/connect/)

**COURSE** | **TITLE** | **S.H.**
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**FIRST YEAR REQUIREMENT - STUDENT SUCCESS** |  | 1-2
YSU 1500 | Success Seminar | 3
or SS 1500 | Strong Start Success Seminar | 1-2
or HONR 1500 | Intro to Honors | 1-2
**General Education Requirement** |  | 3
ENGL 1550 | Writing 1 | 3
or ENGL 1549 | Writing 1 with Support | 3
ENGL 1551 | Writing 2 | 3
CMST 1545 | Communication Foundations | 3
**Mathematics Requirement** |  | 3
Arts and Humanities (2 courses) | Included in Major | 0
Natural Sciences (2 courses, 1 with lab) | 7
Social Science (2 courses) | 6
Social and Personal Awareness (2 courses) | 6
**Major Requirements** |  | 3
Foundation Courses:
ART 1501 | Fundamentals of 2D Design | 3
ART 1502 | Fundamentals of 3D Design | 3
ART 1521 | Foundation Drawing | 3
ART 1522 | Intermediate Drawing | 3
ART 1503 | Foundation Portfolio Review | 1
**Breadth Courses:**
ART 2611 | Introduction to Sculpture | 3
ART 2625 | Introduction to Printmaking: Intaglio and Relief | 3
or ART 2626 | Introduction to Printmaking: Lithography and Screenprinting | 3
ART 2631 | Introduction to Ceramics | 3
ART 2650 | Introduction to Painting | 3
ART 2661 | Introduction to Graphic Design | 3
ART 2674 | Introduction to Photography | 3
**Concentration Courses**
ART 2691 | Introduction to Digital Media | 3
ART 3772 | Digital Photography 1 (or) Interactive Design | 3
or ART 3759 | Interactive Design | 3
ART 3792 | Video Art | 3
ART 3796 | Ideation | 3
ART 3797 | Web as Art | 3
ART 3703 | Junior Portfolio Review | 1
ART 4872 | Digital Photography 2 (or) Intermediate Interactive Design | 3
or ART 3769 | Intermediate Interactive Design | 3
ART 4893 | Advanced Digital Media Studio 1 | 3
ART 4893 | Advanced Digital Media Studio 1 | 3
**Studio Art Electives (6 s.h.)**
Choose two additional 3700 level or higher Studio Art electives from the following courses: 6
ART 3712 | Intermediate Sculpture | 3
ART 3713 | Advanced Sculpture Studio | 3
ART 3715 | Intermediate Metals | 3
ART 3721 | Expressive Drawing | 3
ART 3722 | Interdisciplinary Art Practice | 3
ART 3725 | Intermediate Printmaking | 3
ART 3727 | Topics in Advanced Printmaking | 3
ART 3732 | Intermediate Ceramics | 3
ART 3733 | Advanced Ceramics | 3
ART 3737 | Pre-K4, Visual Arts Education | 3
ART 3748 | Special Topics in Studio Art | 3
ART 3752 | Intermediate Painting | 3
ART 3759 | Interactive Design | 3
ART 3760 | Typography | 3
ART 3761 | Intermediate Graphic Design | 3
ART 3762 | Advanced Typography | 3
ART 3763 | Illustration | 3
ART 3764 | Typeface Design | 3
ART 3765 | Motion for Interactive Design | 3
ART 3768 | Pre-Press Production | 3
ART 3769 | Intermediate Interactive Design | 3
ART 3771 | Analog Photography 1 | 3
ART 3772 | Digital Photography 1 | 3
ART 3794 | Introduction to Motion Studies | 3
ART 3795 | Advanced Digital Audio/Video Production | 3
ART 4800 | Studio Problems | 3
ART 4801 | Interdisciplinary Studies in the Visual Arts | 3
Bachelor of Fine Arts in Studio Arts Digital Media Track

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<tr>
<td>ART 4805</td>
<td>Urban Internship in Art</td>
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<td>ART 4824</td>
<td>Advanced Printmaking</td>
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<td>ART 4834</td>
<td>Advanced 3D Studies</td>
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<td>ART 4837</td>
<td>Professional Practices in Middle School</td>
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<td>ART 4838</td>
<td>Professional Practices in Secondary School</td>
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<td>ART 4851</td>
<td>Advanced Painting</td>
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<td>ART 4852</td>
<td>Advanced Painting 2</td>
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<td>ART 4853</td>
<td>Advanced Painting 3</td>
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<td>ART 4861</td>
<td>Publication Design</td>
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<td>ART 4863</td>
<td>Corporate Identity Systems</td>
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<td>ART 4864</td>
<td>Package Design</td>
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<td>ART 4865</td>
<td>Advertising Graphics</td>
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<td>ART 4867</td>
<td>Graphic Design Internship</td>
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<td>ART 4868</td>
<td>Graphic Design Practicum</td>
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<td>ART 4869</td>
<td>Advanced Interactive Design</td>
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<td>ART 4871</td>
<td>Analog Photography 2</td>
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<td>ART 4872</td>
<td>Digital Photography 2</td>
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<td>ART 4873</td>
<td>Advanced Photography</td>
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<td>ART 4874</td>
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<td>ART 4891</td>
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<td>ART 4896</td>
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<td>ART 5850</td>
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<td>ART 5860</td>
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Art History and Theory

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<tbody>
<tr>
<td>ART 1541</td>
<td>Survey of Art History 1</td>
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<tr>
<td>ART 1542</td>
<td>Survey of Art History 2</td>
<td>3</td>
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<tr>
<td>ART 3792</td>
<td>Video Art</td>
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<tr>
<td>ART 4872</td>
<td>Digital Photography 2</td>
<td>3</td>
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<tr>
<td>ART Breadth Course</td>
<td>ART 3700 level or higher Art History Course</td>
<td>3</td>
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<tr>
<td>General Education Course</td>
<td>ART 3700 level or higher Art History Course</td>
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Electives to meet 120 hours

Total Semester Hours 120-122

1 Must be taken a minimum of three times.

Year 1

<table>
<thead>
<tr>
<th>Semester Hours</th>
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<tbody>
<tr>
<td>13-15</td>
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Fall

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<th>Course Title</th>
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<tr>
<td>YSU 1500</td>
<td>Success Seminar</td>
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<td>or SS 1500</td>
<td>or Strong Start Success Seminar</td>
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<tr>
<td>or HONR 1500</td>
<td>or Intro to Honors</td>
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<tr>
<td>ART 1501</td>
<td>Fundamentals of 2D Design</td>
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<tr>
<td>ART 1521</td>
<td>Foundation Drawing</td>
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<tr>
<td>ENGL 1550</td>
<td>Writing 1</td>
<td>3-4</td>
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Spring

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<td>ART 1522</td>
<td>Intermediate Drawing</td>
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<tr>
<td>ART 1503</td>
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<tr>
<td>ART 1541</td>
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<tr>
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*Must have successful completion of Foundation Portfolio Review prior to taking Art Breadth Courses

Year 2

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<td>ART 2674</td>
<td>Introduction to Photography</td>
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<td>ART 2691</td>
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<td>ART 1542</td>
<td>Survey of Art History 2</td>
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Semester Hours 16

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<tr>
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<td>Video Art</td>
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<td>or ART 3796</td>
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Semester Hours 15

Year 3

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<td>ART 4872</td>
<td>Digital Photography 2</td>
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<td>or ART 3769</td>
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Semester Hours 15

Spring

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<tr>
<td>ART 4893</td>
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<td>Junior Portfolio Review</td>
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<td>ART Breadth Course</td>
<td>ART 3700 level or higher Art History Course</td>
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<tr>
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Semester Hours 15

Year 4

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<td>Advanced Digital Media Studio</td>
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<tr>
<td>ART 3700</td>
<td>Advanced Digital Media Studio</td>
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</tr>
<tr>
<td>ART Breadth Course</td>
<td>ART 3700 level or higher Studio Art Elective</td>
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<tr>
<td>General Education Course</td>
<td>ART 3700 level or higher Studio Art Elective</td>
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Semester Hours 16

Spring

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<tbody>
<tr>
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<td>Senior Project</td>
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<td>ART 4803</td>
<td>Senior Seminar</td>
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<tr>
<td>ART 4893</td>
<td>Advanced Digital Media Studio</td>
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<tr>
<td>ART 3700</td>
<td>Advanced Digital Media Studio</td>
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Semester Hours 15

*Request a Graduation Evaluation from the CCCAC Advising Office, 2310 Bliss Hall, (330) 941-3625 after you have completed 80-85 sh.
Electives to meet 120 hours 2

Semester Hours 14

Total Semester Hours 120-122

Learning Outcomes

1.) Students will be able to demonstrate their proficiency of art vocabulary.
2.) Students will be able to demonstrate technical expertise appropriate to their progression in the program relevant to their chosen artistic medium.
3.) Students will be able to demonstrate a high level of content expression appropriate to their progression in the program relevant to their chosen artistic medium.

Bachelor of Fine Arts in Studio Art 3-Dimensional Studies Track

3D Studies (Ceramics and Sculpture)

Full-Time Faculty
Missy McCormick (http://art.ysu.edu/missy-mccormick/)
Associate Professor
Ceramics
Office: Bliss B006
Phone: 330.941.3701
E-mail: mmccormick@ysu.edu

Part-Time Faculty
Tony Armeni
3D/Sculpture
E-mail: ajarmeni@ysu.edu

Lauren Baker
3D/Sculpture
E-mail: lebaker01@ysu.edu

Jennifer Kirkpatrick
Studio Art Support Specialist
3D/Ceramics/Digital Fabrication
E-mail: jbkirkpatrick@ysu.edu

Ceramics

Whether you are looking to build your career as a fine or craft artist, independent or production designer, or tile, mold, or model maker, YSU’s ceramics program lets you shape your education to suit your passion. As a student, you will be able to fashion a part of your curriculum in the specific direction of ceramics that interests you. YSU’s Department of Art offers one of the largest ceramic studios in the state. The faculty, curriculum, and facility support diverse approaches to contemporary ceramic art, including functional, sculptural, and design-based methodologies. Students have the opportunity to work with a variety of formats, including techniques based on the object, time, installation, utility, and industrial applications.

Advanced students have access to a semi-private studio space and work in a creative environment with open studio hours seven days a week. Ceramics facilities feature over 6,000 square feet of studio space spanning two floors, with separate areas for wheel throwing, hand building, glaze mixing, clay mixing, plasterwork, and documenting artwork.

Various firing possibilities are available with two internal kiln rooms and a gated and covered external kiln area. Innovative technologies and equipment are also available—i.e., 3-D Digital printing, laser cutters, and CNC mills—to expand research possibilities.

Sculpture

The sculpture program emphasizes a broad foundation of technical, critical, and professional skills and enables students to grow as artists by focusing on the development of strong conceptual ideas and personal approaches linked with the informed use of media and technique.

Students are exposed to traditional materials and processes such as carving, clay modeling, welding fabrication, assemblage, mold making, and bronze casting as well as new technologies such as 3-D digital production, rapid prototyping, video, and new media. Students are further encouraged to explore content in installation, performance, time-based art, 3-D computing, ecological or science-based work, and other new genres.

The Sculpture curriculum places strong emphasis on understanding context—cultural, historical, political, and personal—and encourages experimentation, conceptual rigor, and interdisciplinary risk-taking. By offering a rich mix of concept, material, and process, students gain a thorough knowledge and understanding of a full range of contemporary art practices and critical theory in sculpture.

Extensive studio facilities are equipped with a Mac lab, laser cutter, foundry, metal fabrication area, wood shop, and 3-D printers. Advanced sculpture students are provided with semi-private spaces that are close to the process labs.

Contact Information for Department of Art

To learn more about degree programs, scholarships, exhibits, faculty, and students, visit art.ysu.edu (http://artdept.ysu.edu/) or contact the Department of Art directly at 330-941-3627. To schedule a personalized campus visit, contact the Cliffe College Coordinator of Admissions and Recruitment at 330-941-2346.

Email: Connect Form (http://art.ysu.edu/connect/)

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
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<tr>
<td>ART 2611</td>
<td>Introduction to Sculpture</td>
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</table>
ART 2625 Introduction to Printmaking: Intaglio and Relief 3
ART 2626 Introduction to Printmaking: Lithography and Screenprinting 3
ART 2631 Introduction to Ceramics 3
ART 2650 Introduction to Painting 3
ART 2674 Introduction to Photography 3
ART 2691 Introduction to Digital Media 3

Select one from the following four courses: 3
ART 2615 Introduction to Metals
ART 2621 Life Drawing
ART 3721 Expressive Drawing
ART 3722 Interdisciplinary Art Practice

Concentration Courses 3
ART 3732 Intermediate Ceramics
ART 3733 Advanced Ceramics
ART 3712 Intermediate Sculpture
ART 3713 Advanced Sculpture Studio
ART 3703 Junior Portfolio Review 1
ART 4834 Advanced 3D Studies

This course must be taken a minimum of three times.
ART 4834 Advanced 3D Studies

This course must be taken a minimum of three times.
ART 4834 Advanced 3D Studies

This course must be taken a minimum of three times.

ART 4802 Senior Project 3
ART 4803 Senior Seminar 3

Studio Art Electives (9 s.h.)
Choose three additional 3700 level or higher Studio Art electives from the following: 9
ART 3715, 3721, 3722, 3725, 3727, 3737, 3748, 3752, 3759, 3760, 3761, 3762, 3763, 3765, 3767, 3769, 3771, 3772, 3792, 3794, 3795, 3796, 3797, 4800, 4801, 4805, 4824, 4837, 4838, 4851, 4861, 4863, 4864, 4865, 4867, 4868, 4869, 4871, 4872, 4873, 4874, 4891, 4893, 4894, 4896, 5850, 5860

Art History and Theory
ART 1541 Survey of Art History 1 3
ART 1542 Survey of Art History 2 3

Choose three additional 3700 level or higher Art History courses from the following: 9
ART 3741, 3742, 3743, 3744, 3745, 3746, 3747, 3780, 3781, 3782, 3783, 3784, 3785, 3786, 3787, 3788, 3789, 4880, 4883, 4889, 5840, 5860

Electives to meet 120 hours 2

Total Semester Hours 120-122

Year 1

Fall
YSU 1500 or SS 1500 or HONR 1500 Success Seminar or Strong Start Success Seminar or Intro to Honors 1-2
ART 1501 Fundamentals of 2D Design 3
ART 1521 Foundation Drawing 3
ENGL 1550 or ENGL 1549 Writing 1 or Writing 1 with Support 3
Mathematic Requirement 3

Semester Hours 13-15

Spring
ART 1502 Fundamentals of 3D Design 3
ART 1522 Intermediate Drawing 3
ART 1503 Foundation Portfolio Review 1

Year 2

Fall
ART 2611 Introduction to Sculpture 3
ART 2631 Introduction to Ceramics 3
Art Breadth Course 3
ART 1542 Survey of Art History 2 3
General Education Course 3

Semester Hours 15

Spring
ART 3712 Intermediate Sculpture 3
ART 3732 Intermediate Ceramics 3
ART 2621 Life Drawing or 3721 Expressive Drawing, 3722 Interdisciplinary Art Practice, 2615 Introduction to Metals or Art Breadth Course 3
Natural Science Course with lab 4
Art 3700 or Higher Art History Course 3

Semester Hours 15

Year 3

Fall
ART 3713 Advanced Sculpture Studio 3
ART 3733 Advanced Ceramics 3
ART 2621 Life Drawing or 3721 Expressive Drawing, 3722 Interdisciplinary Art Practice, 2615 Introduction to Metals or Art Breadth Course 3
ART 3700 level or higher Art History Course 3
General Education Course 3

Semester Hours 15

Spring
ART 4834 Adv. 3D Studies 3
ART 3703 Junior Portfolio Review 1
ART 3700 level or higher Studio Art Elective 3
Art Breadth Course 3
General Education Course 3
General Education Course 3
Request a Graduation Evaluation from the CCCAC Advising Office, 2310 Bliss Hall, (330) 941-3625 after you have completed 80-85 sh.

Semester Hours 16

Year 4

Fall
ART 4834 Advanced 3D Studies 3
Art Breadth Course 3
ART 3700 level or higher Studio Art Elective 3
ART 3700 level or higher Art History Course 3
General Education Course 3

Semester Hours 15

Spring
ART 4802 Senior Project 3
ART 4803 Senior Seminar 3
ART 4834 Advanced 3D Studies 3
ART 3700 level or higher Studio Art Elective 3
Learning Outcomes

1.) Students will be able to demonstrate their proficiency of art vocabulary.

2.) Students will be able to demonstrate technical expertise appropriate to their progression in the program relevant to their chosen artistic medium.

3.) Students will be able to demonstrate a high level of content expression appropriate to their progression in the program relevant to their chosen artistic medium.

Bachelor of Fine Arts in Studio Art Graphic + Interactive Design Track

Graphic + Interactive Design Faculty

Rich Helfrich (http://art.ysu.edu/rich-helfrich/)
Assistant Professor
Office: Bliss 4075
Phone: 330.941.3775
E-mail: rhelfrich@ysu.edu

Michelle Nelson (http://art.ysu.edu/michelle-nelson/)
Professor
Office: Bliss 4085
Phone: 330.941.1858
E-mail: mnelson@ysu.edu

Graphic + Interactive Design

The studio art major emphasis, Graphic + Interface Design, provides students with a foundation of critical and creative design processes and prepares them for the profession of graphic and interface design — including careers in identity systems, package design, motion and web design, and creative direction. Based primarily on computer technology, students will investigate new ways of solving complex visual problems and use both print and interactive designs as solutions.

Students take one year of Foundations courses that help them hone fine art skills in the elements of composition and design. Once students have passed the Freshman Foundations Portfolio Review, they will learn the formal principles, processes, and vocabulary of print and interface design as well as graphic design history. They develop critical thinking skills and visual conceptualization not only through visual design projects but also through writing and speaking about design processes and critical theory. Students may supplement their coursework with community projects, design competitions, and design work in the university community or through an internship.

Students participate in a Junior Portfolio Review as well as Senior Project, which guide and prepare them for working in the profession or furthering their education in graduate school.

To stay current with industry standards in both print and web, the dedicated faculty of Graphic + Interface Design routinely update the curriculum and attend conferences and workshops to pass along inspiration of today’s practices to YSU students. By remaining active in the field of design, our faculty integrate real-world design issues into classroom curriculum and projects. Graphic + Interface Design faculty are actively involved in helping their students find internships in the surrounding Youngstown and Pittsburgh areas. In addition, students are encouraged to participate in the AIGA student chapter, which is a part of the national AIGA (https://www.aiga.org/) design organization, to gain further community connections and involvement in the field of design.

Contact Information for Department of Art

To learn more about the degree programs, scholarships, exhibitions, faculty, and students, visit art.ysu.edu (http://artdept.ysu.edu/) or contact the Department of Art directly at 330-941-3627. To schedule a campus visit, contact the College Coordinator of Admissions and Recruitment at 330-941-2346.

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<td>or HONR 1500</td>
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<td>ART 4863</td>
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**Fall**

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<td>Junior Portfolio Review (F/S/X)</td>
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*Courses are offered in varying fall, spring and summer semesters. Please see graphic design program coordinator for upcoming schedule.

### Year 4

**Fall**

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*Courses are offered in varying fall, spring and summer semesters. Please see graphic design program coordinator for upcoming schedule.

### Learning Outcomes

1. Students will be able to demonstrate their proficiency of art vocabulary.
2. Students will be able to demonstrate technical expertise appropriate to their progression in the program relevant to their chosen artistic medium.
3. Students will be able to demonstrate a high level of content expression appropriate to their progression in the program relevant to their chosen artistic medium.

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### Bachelor of Fine Arts in Studio Art Interdisciplinary Studio Arts Track

**Interdisciplinary Studio Art Faculty**

Claudia Berlinski (http://art.ysu.edu/claudia-berlinski/)
Interdisciplinary Studio Art

The Interdisciplinary Studio Art program at Youngstown State University was designed specifically for students with an interest in combining multiple disciplines.

Interdisciplinary practice is a central component of contemporary art. Students enrolled in the program explore and combine a variety of media to investigate and examine relevant topics across studio areas. The program fosters innovative thinking and making for those interested in exploring alternative and experimental methodologies.

Working closely with faculty mentors, students following this concentration have the flexibility to select the upper division coursework that corresponds with their unique vision. Students may elect to combine a minimum of eight upper-level courses in digital media, painting, ceramics, printmaking, photography, or sculpture. This rigorous, multi-media program cultivates independent thinking and intellectual curiosity and provides the knowledge and skills necessary to adapt and respond to a myriad of opportunities in a contemporary creative environment.

Contact Information for Department of Art

To learn more about degree programs, scholarships, exhibitions, faculty, and students, visit art.ysu.edu (http://artdept.ysu.edu/) or contact the Department of Art directly at 330-941-3627. To schedule a personalized campus visit, contact the Cliffe College Coordinator of Admissions and Recruitment at 330-941-2346.

Email: Connect Form (http://art.ysu.edu/connect/)

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
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<tbody>
<tr>
<td>YSU 1500</td>
<td>Success Seminar</td>
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<tr>
<td>or SS 1500</td>
<td>Strong Start Success Seminar</td>
<td></td>
</tr>
<tr>
<td>or HONR 1500</td>
<td>Intro to Honors</td>
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General Education Requirements

<table>
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<tr>
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<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 1550</td>
<td>Writing 1</td>
<td>3-4</td>
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<tr>
<td>or ENGL 1549</td>
<td>Writing 1 with Support</td>
<td></td>
</tr>
<tr>
<td>ENGL 1551</td>
<td>Writing 2</td>
<td>3</td>
</tr>
<tr>
<td>CMST 1545</td>
<td>Communication Foundations</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics Requirement</td>
<td></td>
<td>3</td>
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<tr>
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<tr>
<td>Natural Sciences (2 courses, 1 with a lab)</td>
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<td>Social and Personal Awareness (2 courses)</td>
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Major Requirements

Foundation Courses:

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<tbody>
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<td>ART 1501</td>
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<td>ART 1502</td>
<td>Fundamentals of 3D Design</td>
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<tr>
<td>ART 1521</td>
<td>Foundation Drawing</td>
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<td>ART 1522</td>
<td>Intermediate Drawing</td>
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<td>Foundation Portfolio Review</td>
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Breadth Courses:

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<tr>
<td>ART 2625</td>
<td>Introduction to Printmaking: Intaglio and Relief</td>
<td>3</td>
</tr>
<tr>
<td>or ART 2626</td>
<td>Introduction to Printmaking: Lithography and Screenprinting</td>
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<tr>
<td>ART 2631</td>
<td>Introduction to Ceramics</td>
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<tr>
<td>ART 2650</td>
<td>Introduction to Painting</td>
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<tr>
<td>ART 2674</td>
<td>Introduction to Photography</td>
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<td>ART 2691</td>
<td>Introduction to Digital Media</td>
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Choose two 2600 level or higher Studio Art Electives from the following courses (6 s.h.):

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Concentration Courses

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<td>ART 4803</td>
<td>Senior Seminar</td>
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<tr>
<td>ART 4802</td>
<td>Senior Project</td>
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Studio Art Electives (27 s.h.):

Choose nine 3700 or higher Studio Art Electives from the following courses:

<table>
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<th>TITLE</th>
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Art History and Theory

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<td>ART 1541</td>
<td>Survey of Art History 1</td>
<td>3</td>
</tr>
<tr>
<td>ART 1542</td>
<td>Survey of Art History 2</td>
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Choose three additional 3700 or higher Art History courses from the following:
Bachelor of Fine Arts in Studio Art Painting / Printmaking Track

**Electives to meet 120 hours** 2

**Total Semester Hours** 120-122

### Year 1

#### Fall

<table>
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<td>ART 1501</td>
<td>Fundamentals of 2D Design</td>
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<tr>
<td>ART 1521</td>
<td>Foundation Drawing</td>
</tr>
<tr>
<td>ENGL 1550 or ENGL 1549</td>
<td>Writing 1 or Writing 1 with Support</td>
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<td>Mathematics Requirement</td>
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**Semester Hours** 13-15

#### Spring

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<tr>
<td>ART 1502</td>
<td>Fundamentals of 3D Design</td>
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<tr>
<td>ART 1522</td>
<td>Intermediate Drawing</td>
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<tr>
<td>ART 1541</td>
<td>Survey of Art History 1</td>
</tr>
<tr>
<td>ART 1503</td>
<td>Foundation Portfolio Review</td>
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<tr>
<td>ENGL 1551</td>
<td>Writing 2</td>
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<td>CMST 1545</td>
<td>Communication Foundations</td>
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**Semester Hours** 16

### Year 2

#### Fall

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<td>ART 1542</td>
<td>Survey of Art History 2</td>
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**General Education Course** 3

**For this track, ART 26XX Studio Breadth Courses include**

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**Semester Hours** 15

#### Spring

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<td>ART 3700 level or higher Art History Elective</td>
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**General Education Course** 3

**Electives to meet 120 hours** 2

**Semester Hours** 16

### Year 3

#### Fall

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<tr>
<td>ART 3700 level or higher Studio Art Elective</td>
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<td>Natural Science Course with Lab</td>
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**For this track, ART 26XX Studio Breadth Courses include**

<table>
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<tr>
<th>Course</th>
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<tbody>
<tr>
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**Semester Hours** 16

#### Spring

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>ART 3703</td>
<td>Junior Portfolio Review</td>
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<tr>
<td>ART 3700 level or higher Studio Art Elective</td>
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<td>ART 3700 level or higher Studio Art Elective</td>
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<tr>
<td>ART 2600 level or higher Studio Art Elective</td>
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**Semester Hours** 14

### Year 4

#### Fall

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<tr>
<td>ART 3700 level or higher Studio Art Elective</td>
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<tr>
<td>ART 3700 level or higher Studio Art Elective</td>
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<tr>
<td>ART 3700 level or higher Art History Elective</td>
<td>3</td>
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<tr>
<td>General Education Course</td>
<td>3</td>
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</table>

**Electives to meet 120 hours** 2

**Semester Hours** 16

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1 Choice of Breadth Courses should be based on primary studio interests as they will be prerequisites for upper level study.

**Learning Outcomes**

1.) Students will be able to demonstrate their proficiency of art vocabulary.

2.) Students will be able to demonstrate technical expertise appropriate to their progression in the program relevant to their chosen artistic medium.

3.) Students will be able to demonstrate a high level of content expression appropriate to their progression in the program relevant to their chosen artistic medium.

**Bachelor of Fine Arts in Studio Art Painting / Printmaking Track**

**Painting/Printmaking Faculty**

- **Dragana Crnjak** (http://art.ysu.edu/dragana-crnjak/)
  - Professor
  - Painting
  - Office: Bliss 0016
  - Phone: 330.941.1860
  - E-mail: dcrnjak@ysu.edu

- **Joseph D’Uva** (http://art.ysu.edu/joseph-duva/)
  - Associate Professor
  - Printmaking
  - Office: Bliss 4071
  - Phone: 330.941.2540
  - E-mail: jduva@ysu.edu

- **Chris McCullough** (http://art.ysu.edu/chris-mccullough/)
  - Professor
  - Painting
  - Office: Bliss 0016
  - Phone: 330.941.1860
  - E-mail: cmccullough@ysu.edu
Painting
The Painting Program offers balanced instruction towards both technical and conceptual aspects of painting. Students are exposed to a wide range of ideas and processes in relation to both historical and contemporary art practices. Through dynamic in-classroom demonstrations, student-focused discussions, field trips, and regular lectures by visiting artists, students are immersed in the vibrant field of painting.

The Painting Program provides students with spacious, naturally-lit studio rooms, and individual studio spaces are available for advanced art students. The Painting Program is strongly committed to students' professional development and provides students with continuous opportunities to exhibit their artwork in one-person, group, and collaborative exhibitions, as well as in annual juried exhibitions at McDonough Museum of Art and the Butler Institute of American Art.

Printmaking
The studio art major with an emphasis in Printmaking gives the student basic skills and knowledge in both traditional and contemporary print media. The Printmaking Area includes courses that focus on lithography, intaglio, screenprint, relief, monoprint/monotype, and photo/digital based printmaking applications. Students who participate in these courses learn how to create editioned prints and unique, one-of-a-kind printed works. In addition, many printmaking students chose to integrate printmaking processes into other media, such as Painting, Ceramics, Sculpture, Installation, and Graphic Design.

The Printmaking Area also invites students to participate in many events throughout the year, including print specific exhibitions, juried student exhibitions, printmaking fundraising events (which aid in class trips and study abroad opportunities), and collaborative printing in our Red Press Collaborative visiting artist program.

As with all BFA Studio Art majors, students must complete and pass the Freshman Foundation Portfolio Review before beginning the printmaking course sequence. The printmaking major offers a diverse range of media experiences and allows for a progression of technical and aesthetic development to best prepare him/her as a professional print artist, collaborative printer, and/or to continue onto graduate study.

Over the last few years, the Printmaking Facilities have undergone significant changes. The area has been updated with some of the safest, most current equipment/materials in the field, transforming the space into one of the most developed and provides students with continuous opportunities to exhibit their artwork in one-person, group, and collaborative exhibitions, as well as in annual juried exhibitions at McDonough Museum of Art and the Butler Institute of American Art.

Contact Information for Department of Art
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<tr>
<th>COURSE</th>
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<tbody>
<tr>
<td>FIRST YEAR REQUIREMENT - STUDENT SUCCESS</td>
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<tr>
<td>ENGL 1550 or ENGL 1549</td>
<td>Writing 1</td>
<td>3-4</td>
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<tr>
<td>ENGL 1551</td>
<td>Writing 2</td>
<td>3</td>
</tr>
<tr>
<td>CMST 1545</td>
<td>Communication Foundations</td>
<td>3</td>
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<tr>
<td>Mathematics Requirement</td>
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<tr>
<td>Arts and Humanities (2 courses) included in major</td>
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<tr>
<td>Natural Sciences (2 courses, 1 with lab)</td>
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<td>Social Science (2 courses)</td>
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<tr>
<td>Social and Personal Awareness (2 courses)</td>
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Major Requirements
Foundation Courses:
ART 1501 Fundamentals of 2D Design | 3 |
ART 1502 Fundamentals of 3D Design | 3 |
ART 1521 Foundation Drawing | 3 |
ART 1522 Intermediate Drawing | 3 |
ART 1503 Foundation Portfolio Review | 1 |
Breadth Courses:
ART 2611 Introduction to Sculpture | 3 |
ART 2631 Introduction to Ceramics | 3 |
ART 2674 Introduction to Photography | 3 |
ART 2691 Introduction to Digital Media | 3 |
ART 3722 Interdisciplinary Art Practice | 3 |
One breadth elective from the following four courses: 3
ART 2615 Introduction to Metals
ART 2621 Life Drawing
ART 2653 Watercolor
ART 2661 Introduction to Graphic Design

Concentration Courses (Painting or Printing) 22
ART 3703 Junior Portfolio Review
ART 4802 Senior Project
ART 4803 Senior Seminar

Painting Emphasis
ART 2650 Introduction to Painting
ART 2625 Introduction to Printmaking: Intaglio and Relief or ART 2626 Introduction to Printmaking: Lithography and Screenprinting
ART 3725 Intermediate Printmaking
ART 3752 Intermediate Painting
ART 4851 Advanced Painting

Printing Emphasis
ART 2625 Introduction to Printmaking: Intaglio and Relief or ART 2626 Introduction to Printmaking: Lithography and Screenprinting
Bachelor of Fine Arts in Studio Art Painting / Printmaking Track

**Studio Art Electives for both Painting and Printmaking (18 s.h.)**
Choose six additional 3700 level or higher Studio Art electives from the following:

- ART 2650: Introduction to Painting
- ART 3725: Intermediate Printmaking
- ART 3752: Intermediate Painting
- ART 4824: Advanced Printmaking

These courses are recommended electives for this program.

*Some electives may not be available based on your area of emphasis, see adviser for details.*

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### Printmaking

**Year 1**

**Fall**

<table>
<thead>
<tr>
<th>Course</th>
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<td>ART 1522</td>
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<td>ENGL 1550</td>
<td>3-4</td>
<td>Writing 1 or Corequisite Support for Writing 1</td>
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<tr>
<td>CMST 1545</td>
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<td>Communication Foundations</td>
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<tr>
<td>Mathematics Requirement</td>
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**Spring**

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**Total Semester Hours** 13-15

**Year 2**

**Fall**

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<td>Art Breadth Course</td>
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<td>Natural Science with Lab</td>
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**Spring**

<table>
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<tbody>
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<td>ART 2626</td>
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**Total Semester Hours** 16

### Painting

**Year 1**

**Fall**

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<tbody>
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<td>ART 1521</td>
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<td>YSU 1500 or SS 1500</td>
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**Spring**

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<td>ART 1501</td>
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**Total Semester Hours** 13-15
Spring
ART 1502 Fundamentals of 3D Design 3
ART 1522 Intermediate Drawing 3
ART 1503 Foundation Portfolio Review 1
ENGL 1551 Writing 2 3
CMST 1545 Communication Foundations 3
General Education Course 3
Semester Hours 16

Fall
Year 2
ART 2650 Introduction to Painting 3
ART 2625 Introduction to Printmaking: Intaglio and Relief 1
or ART 2626 or Introduction to Printmaking: Lithography and Screenprinting 3
ART 1541 Survey of Art History 1 3
Art Breadth Course 3
Natural Science with Lab 4
Semester Hours 16

Year 3
Fall
ART 3722 Interdisciplinary Art Practice 3
ART 3725 Intermediate Printmaking 3
Art 3700 or Higher Art History Course 3
Art Breadth Course 3
General Education Course 3
Semester Hours 15

Spring
ART 3703 Junior Portfolio Review 1
ART 4851 Advanced Painting 3
ART 3721 Expressive Drawing 2 or Art 3700 level or higher studio art elective 3
Art 3700 level or higher Studio Art Elective 3
Art 3700 or Higher Art History Course 3
General Education Course 3
**Request a Graduation Evaluation from the CCCAC Advising Office, 2310 Bliss Hall, (330) 941-3625 after you have completed 80-85 sh.

Semester Hours 16

Year 4
Fall
ART 4852 Advanced Painting 2 or Art 3700 level or higher studio art elective 3
ART 3700 level or higher Studio Art Elective 3
Art 3700 or Higher Art History Course 3
Art Breadth Course 3
General Education Course 3
Semester Hours 15

Spring
ART 4802 Senior Project 3

Learning Outcomes
1.) Students will be able to demonstrate their proficiency of art vocabulary.

2.) Students will be able to demonstrate technical expertise appropriate to their progression in the program relevant to their chosen artistic medium.

3.) Students will be able to demonstrate a high level of content expression appropriate to their progression in the program relevant to their chosen artistic medium.

Bachelor of Fine Arts in Studio Art Photography Track

Photography Faculty
Joy Christiansen Erb (http://art.ysu.edu/joy-christiansen-erb/)
Professor and Department Chair
Office: Bliss 4001A
Phone: 330.941.3628
E-mail: jchristiansenerb@ysu.edu

Photography
Students in the Photography Program at YSU study photographic processes in both traditional and digital technologies within the context of a fine arts program. They move seamlessly between the darkroom and the digital facilities while exploring historic and contemporary issues within lens-based media. The Photography Program places equal emphasis on the science and craft of photography and on critical thinking and conceptual development. In all coursework, including introductory through advanced level classes, the photography faculty present a variety of concepts and applications related to lens-based media.

As with all BFA Studio Art majors, students begin the photographic course sequence only after they pass the Freshman Foundation Portfolio Review (usually at the end of freshman year); after their Junior Portfolio Review in Photography (usually in the middle of junior year), students begin upper-level coursework. In addition to traditional courses, internships and community opportunities are available to photography majors. F(10) is a student-run photography organization that provides students with opportunities to travel to conferences and also to exhibit their own work.

Contact Information for Department of Art
To learn more about our degree programs, scholarships, exhibitions, faculty, and students, visit art.ysu.edu (http://artdept.ysu.edu/) or contact the Department of Art directly at 330-941-3627. To schedule a personalized campus visit, contact the College Coordinator of Admissions and Recruitment at 330-941-2346.

Email: Connect Form (http://art.ysu.edu/connect/)

COURSE TITLE S.H.
FIRST YEAR REQUIREMENT - STUDENT SUCCESS
YSU 1500 Success Seminar 1-2
or SS 1500 Strong Start Success Seminar
Bachelor of Fine Arts in Studio Art Photography Track

**General Education Requirements**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Semester Hours</th>
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<tbody>
<tr>
<td>ENGL 1550</td>
<td>Writing 1</td>
<td>3-4</td>
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<tr>
<td>or ENGL 1549</td>
<td>Writing 1 with Support</td>
<td></td>
</tr>
<tr>
<td>ENGL 1551</td>
<td>Writing 2</td>
<td>3</td>
</tr>
<tr>
<td>CMST 1545</td>
<td>Communication Foundations</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics Requirement</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Arts and Humanities (2 courses)**

- ART 1501 Fundamentals of 2D Design
- ART 1502 Fundamentals of 3D Design
- ART 1521 Foundation Drawing
- ART 1522 Intermediate Drawing
- ART 1503 Foundation Portfolio Review

**Natural Sciences (2 courses, 1 with lab)**

- ART 2661 Art Breadth Course
- ART 2674 Art Breadth Course
- ART 1542 Survey of Art History 1
- ART 2691 Survey of Art History 2

**Social Science (2 courses)**

- ART 1501 Fundamentals of 2D Design
- ART 1521 Foundation Drawing
- ENGL 1550 Writing 2
- CMST 1545 Communication Foundations

**Social and Personal Awareness (2 courses)**

- ART 1501 Fundamentals of 2D Design
- ART 1521 Foundation Drawing
- ENGL 1550 Writing 2
- CMST 1545 Communication Foundations

**Major Requirements**

**Foundation Courses:**

- ART 1541 Art History and Theory
- ART 1542 Art History and Theory
- ART 2674 Art Breadth Course
- ART 2691 Art Breadth Course
- ART 3703 Survey of Art History 2
- ART 3771 Survey of Art History 1
- ART 4871 Analog Photography 1
- ART 4872 Digital Photography 2
- ART 4873 Advanced Photography
- ART 4874 Senior Project
- ART 4875 Senior Seminar

**Concentration Courses**

- ART 3781 Introduction to Sculpture
- ART 3782 Introduction to Printmaking: Intaglio and Relief
- ART 3783 Introduction to Printmaking: Lithography and Screenprinting
- ART 3784 Introduction to Ceramics
- ART 3785 Introduction to Painting
- ART 3786 Introduction to Graphic Design
- ART 3787 Introduction to Digital Media
- ART 3788 Introduction to Photography
- ART 3789 Special Topics in Studio Art (Photography)
- ART 3790 Analog Photography 2
- ART 3791 Digital Photography 2
- ART 3792 Advanced Photography
- ART 3793 Introduction to Digital Media
- ART 3794 Introduction to Painting
- ART 3795 Introduction to Graphic Design
- ART 3796 Introduction to Digital Media
- ART 3797 Introduction to Photography
- ART 3798 Special Topics in Studio Art (Photography)
- ART 3799 Analog Photography 2
- ART 3800 Digital Photography 2
- ART 3801 Senior Project
- ART 3802 Senior Seminar

**Studio Art Electives (9 s.h.)**

Choose three additional 3700 level or higher Studio Art electives from the following:

- ART 3712, 3713, 3715, 3721, 3722, 3725, 3727, 3732, 3733, 3737, 3748,
- ART 3752, 3759, 3760, 3761, 3762, 3763, 3764, 3765, 3768, 3769, 3792, 3794,
- ART 3795, 3796, 3797, 4800, 4801, 4805, 4824, 4834, 4837, 4838, 4851, 4861,
- ART 4863, 4864, 4865, 4867, 4868, 4869, 4874, 4891, 4893, 4894, 4896, 5850,
- MATH 2623 Quantitative Reasoning

**Electives to meet 120 hours**

2

**Total Semester Hours**

120-122

**Year 1**

**Fall**

- YSU 1500 Success Seminar 1-2
- ART 1501 Fundamentals of 2D Design 3
- ART 1521 Foundation Drawing 3
- ENGL 1550 Writing 1 3
- ART 3703 Survey of Art History 2 3

**Spring**

- ART 1502 Fundamentals of 3D Design 3
- ART 1522 Intermediate Drawing 3
- ART 1503 Foundation Portfolio Review 1
- ENGL 1551 Writing 2 3
- CMST 1545 Communication Foundations 3

**General Education Course**

3

**Year 2**

**Fall**

- ART 2674 Introduction to Photography (F/S/X) 3
- ART 2691 Introduction to Digital Media (F/S) 3
- ART 1541 Survey of Art History 1 3
- Art Breadth Course 3
- Natural Science Course with Lab 4

**Spring**

- ART 1542 Survey of Art History 2 3
- ART 3771 Analog Photography 1 (*) 3
- Art Breadth Course 3
- Art Breadth Course 3
- General Education Course 3

*Courses are offered in varying fall and spring semesters. Please see photography program coordinator for upcoming schedule.

**Year 3**

**Fall**

- ART 3771 or ART 4872 Analog Photography 1 (*) 3
- ART 4871 or ART 4872 Analog Photography 2 (*) Prereq: 3771 for 4871 and 3772 for 4872 3
- ART 2661 Introduction to Graphic Design 3
- Art 3700 or Higher Art History Course 3
- Art Breadth Course 3

*Courses are offered in varying fall and spring semesters. Please see photography program coordinator for upcoming schedule.

**Semester Hours**

15

**Year 4**

**Fall**

Choose three additional 3700 level or higher Art History courses from the following:

- ART 3741, 3742, 3743, 3744, 3745, 3746, 3747, 3780, 3781, 3782, 3783,
- 3784, 3785, 3786, 3787, 3788, 3789, 4880, 4889, 5840, 5881
Learning Outcomes

1.) Students will be able to demonstrate their proficiency of art vocabulary.

2.) Students will be able to demonstrate technical expertise appropriate to their progression in the program relevant to their chosen artistic medium.

3.) Students will be able to demonstrate a high level of content expression appropriate to their progression in the program relevant to their chosen artistic medium.

Bachelor of Science in Education in Art Education (PK to 12) Multi-Age License

Art Education Faculty

Dr. Samuel Adu-Poku (http://artdept.ysu.edu/dr-samuel-adu-poku/)
Professor
Office: Beeghly Hall 2404
Phone: 330.941.1866
E-mail: sadupoku@ysu.edu

Dr. Lillian Lewis (http://art.ysu.edu/dr-lillian-lewis/)
Assistant Professor
Office: Beeghly Hall 2404
Phone: 330.941.1865
E-mail: llewis02@ysu.edu

Art Education students are first and foremost artists who want to teach. They are dedicated to becoming lifelong learners, artists, researchers, and teachers. Prospective art teachers are leaders and advocates for the arts in schools, museums, community centers, and other settings while also caring about students with diverse abilities and their learning and nurturing their love of visual art.

At YSU, our program fosters professional teaching skills along with creative and intellectual growth. Students work with art education faculty who have a diverse set of research interests, ranging from the use of digital technology in the classroom and international studies to art curriculum and instruction and multicultural art education. Small class sizes and hands-on field teaching experiences effectively prepare students to enter the profession of teaching or a graduate degree program. Our graduates find rewarding and meaningful employment in public and private schools, community centers, museums, and galleries.

Students may elect art education as their major in the Department of Art as freshmen; however, they may only begin to enroll in art education and breath studio courses after successfully completing the Freshman Foundation Portfolio Review. As juniors, they will begin completing required courses, including those in professional education. The B.S.Ed. leads to teaching licensure in the State of Ohio.

Contact Information for Department of Art

To learn more about the degree programs, scholarships, exhibitions, faculty, and students, visit art.ysu.edu (http://art.ysu.edu/) or contact the Department of Art directly at 330-941-3627. To schedule a personalized campus visit, contact the Cliffe College Coordinator of Admissions and Recruitment at 330-941-2346.

Email: Connect Form (http://art.ysu.edu/connect/)
Important Notes:

Arts and Humanities (included in major) 0
Natural Sciences (2 courses, 1 with lab) 7
Social Science (1 course) 3
PSYC 1560 General Psychology 3
Social and Personal Awareness (2 courses) 6

Art Foundation Courses
ART 1501 Fundamentals of 2D Design 3
ART 1502 Fundamentals of 3D Design 3
ART 1503 Foundation Portfolio Review 1
ART 1521 Foundation Drawing 3
ART 1522 Intermediate Drawing 3

Art Breadth Courses
ART 2611 Introduction to Sculpture 3
ART 2625 Introduction to Printmaking: Intaglio and Relief or ART 2626 Introduction to Printmaking: Lithography and Screenprinting 3
ART 2631 Introduction to Ceramics 3
ART 2650 Introduction to Painting 3
ART 2661 Introduction to Graphic Design 3
ART 2674 Introduction to Photography 3
ART 2691 Introduction to Digital Media 3

Art Education Courses
ART 3737 Pre-K-4, Visual Arts Education 3
ART 3757 Art Education for Diverse Populations 3
ART 4837 Professional Practices in Middle School (+) 3
ART 4838 Professional Practices in Secondary School (+) 3
ART 4839 Seminar in Art Education (+) 3

Professional Education Coursework
EDFN 1501 Introduction to Education 3
TERG 2610 Reading Application in Content Areas Middle Years 3
SPED 2630 Individuals with Exceptionalities in Society 2 3
EDFN 3708 Education and Society (+) 3
PSYC 3709 Psychology of Education (+) 3

Student Teaching Coursework
ART 4844 Supervised Student Teaching: Art (K-12) (+) 10
ART 4842A Student Teaching Seminar for Art Education (+) 2

Art History and Theory
ART 1541 Survey of Art History 1 3
ART 1542 Survey of Art History 2 3
Choose two 3700 level or higher Art History course from the following: (+) 6
ART 3741, 3742, 3743, 3744, 3745, 3746, 3747, 3780, 3781, 3782, 3783, 3784, 3786, 3787, 3789, 4880, 4883, 4889, 5840, 5881

Total Semester Hours 120-122

Neither admission to the University nor declaration of a major related to a teaching field guarantees admission to the Department of Art's Art Education program, BCOE's Teacher Education Programs or candidacy for a teaching license. Formal Admission to Department of Art and Teacher Education (Upper-Division) is required before teacher candidates are allowed to enroll in certain junior and senior level courses in BCOE and Cliffe College's Art Ed Program. Undetermined education majors must declare a major before applying for admission to a Department of Art's Art Ed Program or Teacher Education Program.

Admission to a Department of Art's Art Ed Program and Teacher Education Program is obtained upon satisfactory completion of the following requirements:

_____ Minimum completion of 50 SH
_____ Minimum 2.75 overall GPA

Meet one of the following criteria:

_____ Overall GPA 3.4 or better, OR
_____ ACT scores of Reading-21, English-18, Math-22, AND/ OR
_____ SAT scores of Reading-480, Writing-480, Math-530, AND/ OR
_____ Praxis CORE scores, Reading-156, Writing-162, Math-150

(Attach a copy of your CORE scores to the application) "B" average or better (A-C, B-B) for:

_____ ENGL 1550
_____ ENGL 1551.

If failure to meet "B" average above must also complete:

_____ ENGL 2601 grade of "B" or better.

If you receive a "C" or below you will need to retake the course. "B" average or better (B-B-B, A-B-C) across the following:

_____ CMST 1545
_____ EDFN 1501
_____ SPED 2630
_____ART 1541 or ART 1542.

If student does not have a "B" average, student will be required to retake one or more of these courses until the "B" average is achieved. A grade of "C" or better is required in all required major courses. Courses taken as "CR/NC" will not count towards the major. Professional education and block courses may only be repeated one time. Minimum requirements for teaching license are determined by the Ohio Department of Education; if those requirements change, they become effective immediately at Youngstown State University.

(YSU Undergraduate Catalog)

Upper-Division Application Process:

Upper division application and forms must be printed from the Cliffe College's Department of Art website and turned into the Cliffe College's Art Academic Advisor in Bliss Hall, Rm. 2324.

After completing a minimum of 50 SH, submit the following:

Upper Division Application Form, Good Moral Character Statement, Social Media Usage Acknowledgement Form, Copy of BCI & FBI Clearances, Schedule an upper division interview with the Department of Art's Art Education Program Coordinator, no later than the Upper Division Application Deadline:

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1 All students must complete and pass the Foundation Portfolio Review to take additional studio classes.
2 Department of Art and BCOE Notes: Advisement is highly recommended that all teacher candidates meet with an academic advisor every semester. Freshmen, athletes, and students on warning and probation are required to meet with an advisor before registration. At the completion of 30 SH any teacher candidate who:1) was required to and has not passed PRAXIS Core Exam(s), or 2) holds a GPA of 2.25 or below will be referred to Central Advising for advising and career services. If at a later date the teacher candidate passes all required parts of the Praxis Core Exam and attains a GPA of 2.25 or higher that student may return to Cliffe College for advising.

Important Notes:
September 1 —to register for Upper Division Courses for Spring

February 1 — to register for Upper Division courses for Summer & Fall

Each completed application is reviewed and approved by the Upper Division Admission and Retention Committee. If all requirements are met, the teacher candidate will receive an acceptance letter and may register for Upper Division courses for the following semester. Upper Division courses are the courses designated with the “*” symbol. Applications submitted after the deadline will not be processed until the end of the respective semester.

Program Notes:

Candidates will not be permitted to take the following professional education courses more than twice: EDFN 1501, EDFN 3708, PSYC 3709, SPED 2630, TERG 2610, all preclinical experience courses, student teaching, and student teaching seminar. If the program is concerned regarding teacher candidate performance in the preclinical experience, as determined by CPAST criteria, the program coordinator may require the teacher candidate to complete an additional preclinical experience prior to the student teaching experience.

Ohio Assessment for Educators (OAE) Exams:

Candidates are required to take and pass the APK and the OAE Art Exam to be eligible for student teaching. APK can be taken as soon as you pass Psychology of Education. OAE Art Exam should be taken the semester before student teaching. Information for both tests can be found here: www.oh.neinc.com (https://www.oh.nesinc.com/).

Request for Graduation Evaluation:

Graduation evaluation request must be submitted one year prior to the intended graduating semester no later than:

September 1 —for Fall

February 1 —for Spring

Student Teaching Prerequisites:

Department of Art’s Art Ed program and BCBOE Upper Division and Senior status, Overall 2.75 GPA, Minimum of 2.67 GPA in subject area curriculum and professional education courses with no grade less than a “C” (each computed individually). Completion of Graduation Evaluation, and Passing of OAE test(s). Instructions for completing the Student Teaching Application and Forms are available on Cliffe College’s Department of Art website.

The application and forms must be completed and printed from the Cliffe College's Department of Art website and submitted to the Cliffe College's Art Academic Advisor in Bliss Hall, Rm. 2324 no later than:

September 1 — to Student Teach the following Spring Semester

February 1 — to Student Teach the following Fall Semester

Graduation Process:

Apply for graduation during the first three weeks of the semester you plan to graduate. Graduation evaluation must be completed in advance of application for graduation.

Completing a Bachelor of Science in Education without Licensure:

Teacher candidates who choose to graduate without licensure must apply for approval with the Cliffe College Art Academic Advisor in Bliss Hall, Rm. 2324. Once approved, teacher candidates graduating without licensure must take TCED 4830 (3 SH) capstone in place of student teaching or have a total of 120 s.h. completed at the university.

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Fall</th>
<th>S.H.</th>
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<tbody>
<tr>
<td>ART 1501</td>
<td>Fundamentals of 2D Design</td>
<td>3</td>
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<tr>
<td>ART 1521</td>
<td>Foundation Drawing</td>
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<tr>
<td>ENGL 1550 or ENGL 1549</td>
<td>Writing 1 or Writing 1 with Support</td>
<td>3-4</td>
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<td>EDFN 1501</td>
<td>Introduction to Education (*BCI check required)</td>
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<td>YSU 1500 or SS 1500 or HONR 1500</td>
<td>Success Seminar or Strong Start Success Seminar or Intro to Honors</td>
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<tbody>
<tr>
<td>ART 1541</td>
<td>Survey of Art History 1</td>
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<td>ART 2650</td>
<td>Introduction to Painting (or other Art Breadth Course)</td>
<td>3</td>
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<td>TERG 2610</td>
<td>Reading Application in Content Areas Middle Years</td>
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<tr>
<td>ART 2631</td>
<td>Introduction to Ceramics (or other Art Breadth Course)</td>
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| Natural Science with Lab | 4 |

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<tbody>
<tr>
<td>ART 4837</td>
<td>Professional Practices in Middle School</td>
<td>3</td>
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<tr>
<td>ART 2661</td>
<td>Introduction to Graphic Design (or other Art Breadth Course)</td>
<td>3</td>
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<td>EDFN 3708</td>
<td>Education and Society</td>
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<tr>
<td>ART 2674</td>
<td>Introduction to Photography (or other Art Breadth Course)</td>
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| General Education - Natural Science | 3 |

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<th>Year 3</th>
<th>Spring</th>
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<tbody>
<tr>
<td>ART 3757</td>
<td>Art Education for Diverse Populations</td>
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<tr>
<td>ART 2625 or ART 2626</td>
<td>Introduction to Printmaking: Intaglio and Relief (or other Art Breadth Course) or Introduction to Printmaking: Lithography and Screenprinting</td>
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<tr>
<td>ART 3700 or higher Art History Course</td>
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<tr>
<td>PSYC 3709</td>
<td>Psychology of Education</td>
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| General Education - Social & Personal Awareness | 3 |

<table>
<thead>
<tr>
<th>Semester Hours</th>
<th>15</th>
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</table>
ART 2691    Introduction to Digital Media (or other Art Breadth Course) 3

*For spring semester student teaching, students should take the OAE exam between May of the third year and August of the fourth year.

**Request a Graduation Evaluation from the CCCAC Advising Office, 2324 Bliss Hall, (330) 941-3625 after you have completed 80-85 sh.

Semester Hours 18

Year 4

Fall
ART 4838    Professional Practices in Secondary School 3
Art 4839 Seminar in Art Education 3
ART 3700 level or higher Art History Course 3
General Education - Social & Personal Awareness 3
General Education - Social Science 3

*Anyone planning to student teach in the spring semester must apply for student teaching by September 1st. The deadline for Fall student teaching is the previous February 1st.

Semester Hours 15

Spring
ART 4844    Supervised Student Teaching: Art (K-12) 10
ART 4842A   Student Teaching Seminar for Art Education 2

Total Semester Hours 120-122

Learning Outcomes
The student learning outcomes for visual arts Pre-K to 12 are as follows:

• Students will demonstrate thorough knowledge of arts vocabulary.
• Students will demonstrate skills in communicating verbally and visually in their knowledge about the arts.
• Students will achieve the highest possible level of technical skills in the appropriate medium.
• Students will achieve the highest possible level of content expression in the appropriate medium.
• Students will demonstrate working knowledge of trends in general art history and theory with an emphasis in 20th century art.
• Students will demonstrate pedagogical skills and insights as they pertain to specific classroom needs.
• Students will demonstrate awareness and growth in confidence in teaching contemporary strategies while teaching the visual arts.
• Students will demonstrate skill in discriminating between creative (divergent) experiences and those that do not promote the artistic growth of the child (convergent).

Minor in Digital Media for Non-Art Majors

COURSE    TITLE                      S.H.
ART 1501    Fundamentals of 2D Design 3
ART 2691    Introduction to Digital Media 3
Select four of the following: 12
ART 3748    Special Topics in Studio Art (Digital Media)
ART 3792    Video Art
ART 3796    Ideation
ART 3797    Web as Art
ART 4800    Studio Problems (Digital Media)
ART 4893    Advanced Digital Media Studio (may be repeated 2 times for 6 s.h.)

Total Semester Hours 18

Minor in Digital Media for Studio Art Majors

COURSE    TITLE                      S.H.
ART 2691    Introduction to Digital Media 3
Select five (5) courses from the following: 15
ART 3792    Video Art (3 s.h.)
ART 3796    Ideation (3 s.h.)
ART 3797    Web as Art (3 s.h.)
ART 3748    Special Topics in Studio Art (*Digital Media 3 s.h.)
ART 4800    Studio Problems (may be taken twice 3-6 s.h. (permission of instructor required))
ART 4893    Advanced Digital Media Studio (may be taken twice 3-6 s.h.)

Total Semester Hours 18

Minor in Graphic Design for Non-Art Majors

COURSE    TITLE                      S.H.
ART 1501    Fundamentals of 2D Design 3
ART 2661    Introduction to Graphic Design 3
ART 3760    Typography 3
ART 3761    Intermediate Graphic Design 3
Select two of the following: 6
ART 3762    Advanced Typography
ART 4861    Publication Design
ART 4864    Package Design
ART 3763    Corporate Identity Systems
ART 3764    Typeface Design
ART 3748    Special Topics in Studio Art (Graphic + Interactive Design)
ART 3759    Interactive Design

Total Semester Hours 18

Minor in Graphic Design for Studio Art Majors

COURSE    TITLE                      S.H.
ART 2661    Introduction to Graphic Design 3
ART 3760    Typography 3
ART 3761    Intermediate Graphic Design 3
Select three of the following: 9
ART 3762    Advanced Typography
ART 4861    Publication Design
ART 3748    Special Topics in Studio Art (Graphic + Interactive Design)
ART 4863    Corporate Identity Systems
ART 3759    Interactive Design
ART 3764    Typeface Design
### Minor in Interactive Design for Non-Art Majors

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
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<tbody>
<tr>
<td>ART 1501</td>
<td>Fundamentals of 2D Design</td>
<td>3</td>
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<tr>
<td>ART 2661</td>
<td>Introduction to Graphic Design (Art 1501)</td>
<td>3</td>
</tr>
<tr>
<td>ART 3759</td>
<td>Interactive Design</td>
<td>3</td>
</tr>
<tr>
<td>ART 3760</td>
<td>Typography</td>
<td>3</td>
</tr>
<tr>
<td>ART 3769</td>
<td>Intermediate Interactive Design (prerequisites 3759 &amp; 3760)</td>
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</table>

Select one of the following:
- ART 4869 Advanced Interactive Design (prerequisite Art 3769)
- ART 4875 Motion for Interactive Design
- ART 3761 Intermediate Graphic Design
- ART 4863 Corporate Identity Systems
- ART 3748 Special Topics in Studio Art (Graphic + Interactive Design)

Total Semester Hours 18

### Minor in Interactive Design for Studio Art Majors

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
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<tbody>
<tr>
<td>ART 2661</td>
<td>Introduction to Graphic Design</td>
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<tr>
<td>ART 3759</td>
<td>Interactive Design</td>
<td>3</td>
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<tr>
<td>ART 3760</td>
<td>Typography</td>
<td>3</td>
</tr>
<tr>
<td>ART 3769</td>
<td>Intermediate Interactive Design (prerequisites 3759 &amp; 3760)</td>
<td>3</td>
</tr>
</tbody>
</table>

Select two of the following:
- ART 4869 Advanced Interactive Design
- ART 3761 Intermediate Graphic Design
- ART 3765 Motion for Interactive Design
- ART 4863 Corporate Identity Systems
- ART 3748 Special Topics in Studio Art (Graphic + Interactive Design)

Total Semester Hours 18

### Minor in Interdisciplinary Art for Studio Majors

Select 18 credits from two or three Studio Art disciplines (painting, printmaking, ceramics, sculpture, etc). Two courses must be upper division. Students cannot double count courses between the major and the minor.

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 3752</td>
<td>Intermediate Painting</td>
<td>3</td>
</tr>
<tr>
<td>ART 4851</td>
<td>Advanced Painting</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Semester Hours 18

### Minor in Interdisciplinary Art for Studio Non-Art Majors

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 1501</td>
<td>Fundamentals of 2D Design</td>
<td>3</td>
</tr>
<tr>
<td>ART 1521</td>
<td>Foundation Drawing</td>
<td>3</td>
</tr>
<tr>
<td>ART 1502</td>
<td>Fundamentals of 3D Design</td>
<td>3</td>
</tr>
</tbody>
</table>

Select one 2600-level course from any fine art discipline (drawing, printmaking, painting, ceramics, sculpture).

Select two 3700-level courses from any fine art discipline (drawing, printmaking, painting, ceramics, sculpture).

Total Semester Hours 18

### Minor in Painting for Non-Art Majors

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 1501</td>
<td>Fundamentals of 2D Design</td>
<td>3</td>
</tr>
<tr>
<td>ART 1521</td>
<td>Foundation Drawing</td>
<td>3</td>
</tr>
<tr>
<td>ART 2650</td>
<td>Introduction to Painting</td>
<td>3</td>
</tr>
<tr>
<td>ART 3752</td>
<td>Intermediate Painting</td>
<td>3</td>
</tr>
</tbody>
</table>

Select three of the following:
- ART 2653 Watercolor
- ART 4851 Advanced Painting
- ART 4852 Advanced Painting 2
- ART 4800 Studio Problems (Painting)

Total Semester Hours 18

### Minor in Painting for Studio Art Majors

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 3752</td>
<td>Intermediate Painting</td>
<td>3</td>
</tr>
<tr>
<td>ART 4851</td>
<td>Advanced Painting</td>
<td>3</td>
</tr>
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</table>

Total Semester Hours 21
### Minor in Printmaking for Studio Art Majors

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 2625</td>
<td>Introduction to Printmaking: Intaglio and Relief</td>
<td>3</td>
</tr>
<tr>
<td>ART 2626</td>
<td>Introduction to Printmaking: Lithography and Screenprinting</td>
<td>3</td>
</tr>
</tbody>
</table>

Take 12 credit hours of the following courses:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 3725</td>
<td>Intermediate Printmaking</td>
<td></td>
</tr>
<tr>
<td>ART 4824</td>
<td>Advanced Printmaking (may be taken up to 3 times for 3-6 s.h.)</td>
<td></td>
</tr>
<tr>
<td>ART 4800</td>
<td>Studio Problems (may be taken up to 3 times for 3-6 s.h.)</td>
<td></td>
</tr>
</tbody>
</table>

**Total Semester Hours** 18

### Minor in Photography for Non-Art Majors

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 1501</td>
<td>Fundamentals of 2D Design</td>
<td>3</td>
</tr>
<tr>
<td>ART 2674</td>
<td>Introduction to Photography</td>
<td>3</td>
</tr>
<tr>
<td>ART 3772</td>
<td>Digital Photography 1</td>
<td>3</td>
</tr>
<tr>
<td>ART 3771</td>
<td>Analog Photography 1</td>
<td>3</td>
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</table>

Select two of the following:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 4872</td>
<td>Digital Photography 2</td>
<td>3</td>
</tr>
<tr>
<td>ART 4871</td>
<td>Analog Photography 2</td>
<td>3</td>
</tr>
<tr>
<td>ART 3748</td>
<td>Special Topics in Studio Art</td>
<td></td>
</tr>
<tr>
<td>ART 4873</td>
<td>Advanced Photography</td>
<td></td>
</tr>
<tr>
<td>ART 4800</td>
<td>Studio Problems (Photography)</td>
<td></td>
</tr>
</tbody>
</table>

**Total Semester Hours** 18

### Minor in Photography for Art Majors

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 3772</td>
<td>Digital Photography 1</td>
<td>3</td>
</tr>
<tr>
<td>ART 3771</td>
<td>Analog Photography 1</td>
<td>3</td>
</tr>
</tbody>
</table>

Select four courses from the following:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 4871</td>
<td>Analog Photography 2</td>
<td>3</td>
</tr>
<tr>
<td>ART 4872</td>
<td>Digital Photography 2</td>
<td>3</td>
</tr>
<tr>
<td>ART 3748</td>
<td>Special Topics in Studio Art</td>
<td></td>
</tr>
<tr>
<td>ART 4873</td>
<td>Advanced Photography</td>
<td></td>
</tr>
<tr>
<td>ART 4800E</td>
<td>Studio Problems in Photography (may be repeated two times)</td>
<td></td>
</tr>
</tbody>
</table>

**Total Semester Hours** 18

### Minor in Printmaking for Non-Art Majors

**SELECT 18 HOURS TOTAL AS DIRECTED BELOW:**

Select one or both of the following:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 1501</td>
<td>Fundamentals of 2D Design</td>
<td>3</td>
</tr>
<tr>
<td>ART 1521</td>
<td>Foundation Drawing</td>
<td></td>
</tr>
</tbody>
</table>

Select one or both of the following:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 2625</td>
<td>Introduction to Printmaking: Intaglio and Relief</td>
<td>3</td>
</tr>
<tr>
<td>ART 2626</td>
<td>Introduction to Printmaking: Lithography and Screenprinting</td>
<td>3</td>
</tr>
</tbody>
</table>

Select an additional 6-12 semester hours of:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 3725</td>
<td>Intermediate Printmaking</td>
<td></td>
</tr>
<tr>
<td>ART 4824</td>
<td>Advanced Printmaking</td>
<td></td>
</tr>
<tr>
<td>ART 4800</td>
<td>Studio Problems (Printmaking)</td>
<td></td>
</tr>
</tbody>
</table>

**Total Semester Hours** 18

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**Mission Statement**

The Dana School of Music fosters a vibrant community of student and faculty musicians/scholars who work across broad yet interrelated areas.
The curriculum may be divided into seven components:

- composition
- music education
- music theory
- music history
- performance
- music recording
- liberal arts

**Learning Outcomes**

**General Outcomes**

- Students will perform a public recital in their applied area.
- Students will analyze music, discriminate pitch, harmony, and rhythm, and perform harmonic progressions at the piano.
- Students will demonstrate critical thinking about the various historical periods, cultural contexts, and social forces that influence musical activity.
- Students will demonstrate basic keyboard proficiency including scales, arpeggios, harmonization, repertoire, transpositions, and score reading.

Additional Outcomes for Specific Programs

- **BM – Composition**: Students will compose music in a variety of genres.
- **BM – Jazz Studies**: Students will perform, improvise, compose, and arrange jazz music.
- **BM – Recording**: Students will record, edit, and produce music.
- **BA – Music History/Music Theory**: Students will complete a research project, inclusive of a final document, on a music-historical or music-theoretical subject.

**Accreditation**

The Dana School of Music is accredited by the National Association of Schools of Music (NASM) (https://nasm.arts-accredit.org/).

- Date of Initial Accreditation: 9/1/1947
- Year of Most Recent Comprehensive Review: 2010
- Academic Year of Next Scheduled Comprehensive Review: 2020-2021

Dana School of Music requirements for entrance and graduation are in accordance with the published regulations of the National Association of Schools of Music.

**Programs**

The Bachelor of Music degree may be earned in the following majors:

- composition
- jazz
- music education
- music recording emphasis
- percussion
- piano
- organ
- standard brass, string, or wind instruments
- voice

**Bachelor of Arts**

The Bachelor of Arts degree may be earned in the following majors:

- music history
- music theory
- performance

The BA degrees allow for work in minor areas. For instance, the BA in Performance allows for more extensive coursework in nonprofit leadership, entrepreneurship, and video production.

**Bachelor of Music in Education**

The music education program prepares students for licensure as music teachers in the public schools and also provides other courses necessary for general elementary teaching certificates. Through excellent collaboration between the University and area school districts and teachers, music education students have a variety of opportunities for observation and student teaching.

For further information, please see the Cliffe College of Creative Arts and Communication advisement page (http://www.ysu.edu/academics/college-creative-arts-and-communication/ccac-advisement/).

**Facilities**

The Dana School is one of four departmental units in the Cliffe College of Creative Arts and Communication. Housed in Bliss Hall, the School includes practice rooms, faculty studios, classrooms, rehearsal facilities, and the Bliss Recital Hall, which has a seating capacity of 237. Our faculty and students also perform in several regional halls, including Stambaugh Auditorium (http://www.stambaughauditorium.com/) and the DeYor Performing Arts Center (http://www.youngstownsymphony.com/special-events/).

**Equipment**

Equipment includes

- 92 Steinway pianos
- 30 MIDI pianos
- harpsichord by Dowd
- two Schlicker pipe organs
- three Flentrop pipe organs
- consorts of Renaissance wind and brass instruments
- a comprehensive collection of standard band and orchestral instruments

Many University-owned instruments are available for use by students enrolled in related courses. Although there is no charge for use of these instruments, failure to comply with check-in deadlines will result in a $5.00-a-day fine or replacement for each instrument.
MIDI Classroom
The Dana School of Music provides students with the opportunity to utilize state-of-the-art technology; music computer software and hardware includes advanced music notation, music sequencing (composition/arranging), and automatic accompaniment applications. The classroom features Macintosh workstations, each fully MIDI-equipped.

Music Recording Studio
The Dana Recording Studio features a 12 core Intel Mac tower running Avid Pro-Tools 11, MOTU Digital Performer 7.24, and Apple Logic DAWs software. We have Universal Audio Apollo interfaces and a Tascam DM4800 fully automated mix surface that also serves as an additional audio interface. The studio utilizes outboard Kurzweil and Roland keyboards, controllers, and synths, as well as Reason 7 and the Native Instruments Komplete 10 software package. We feature Shure Large Diaphragm Condenser mics, Audio Technica SDC mics, Shure Beta 58s and 57s; our mic locker also includes a matched pair of Cascade Fathead II ribbon microphones. We use Genelec 1031 monitoring system with 7050b Sub.

Libraries
The School’s extensive libraries of band, choral, and orchestral music represent musical periods from the Middle Ages to the present. Maag Library (http://maag.ysu.edu/) contains books, an extensive collection of printed music, recordings, research journals, and additional technology.

Scholarships and Loans
The Dana School of Music offers a wide range of scholarships, which are awarded after competitive auditions on the basis of talent and academic achievement. For information about additional scholarships, please visit the YSU Scholarship Search (http://cfweb.cc.ysu.edu/finaid/scholar/est_scholar.cfm) page.

Musical Activities, Ensembles
Each year, Dana School of Music faculty and students perform over 100 concerts in the region, across the United States, and internationally. Recent student performances have included Wind Ensemble concerts in Carnegie Hall and at the Ohio Music Education Association Annual Professional Conference; Stroud All-Ohio Classical Guitar Competition; Jazz Ensembles at BLU Jazz; Percussion Ensemble performances at the Ohio Music Education Association Annual Professional Conference; and Dana Chorale concerts in South Korea. Faculty concerts have featured Dr. Kivie Cahn-Lipman with ACROMYM (http://www.acronymensemble.com/home/); Dr. Kent Englehardt with the East Central Jazz Educators All Star Big Band (https://www.facebook.com/ECJEAllStarBigBand/); Drs. Francois Fowler and Kathryn Umble with Duo Allant (http://www.duallant.com/home.html); Dr. Misook Yun in Hungary (http://www.summermusicstudyinhungary.com/copy-of-faculty/); and Dr. Cicilia Yudha with the Duke University Symphony Orchestra (https://www.ciciliayudha.com/2017/).

The School has numerous performing ensembles:

- Barbershop Chorus
- Brass, Percussion, String, and Woodwind Ensembles
- Chamber Music
- Chamber Orchestra
- Composer Ensemble
- Concert Band
- Dana Chorale
- Dana Symphony Orchestra
- Early Music Ensemble
- Gospel Choir
- Jazz Compos

- Jazz Ensemble
- Marching Band
- Opera Workshop
- Wind Ensemble
- University Chorus

Student Activities
Music students may participate in all Youngstown State University student activities. Of special interest to music students are the student chapters of:

- Dana Guitar Association
- Dana Piano Guild
- Dana Research Society
- Dana Vocal Society
- New Music Society
- Ohio Collegiate Music Educators Association
- Phi Mu Alpha
- Sigma Alpha Iota
- Youngstown Jazz Collective
- Youngstown Percussion Collective

Fees
See the Fees and Expenses (p. 20) section of the Undergraduate Catalog.

Application and Admission Examinations
For admission to the Dana School of Music, prospective students must first be admitted to Youngstown State University. For information, please visit the YSU Admissions (https://ysu.edu/admissions/apply-to-ysu/) webpage or call our Admissions Office toll free (877) 468-6978 (877-GO-TO-YSU) or local (330) 941-2000.

Applicants are required to pass entrance auditions in their performance area and to take placement examinations in music theory and piano. Auditions (http://www.ysu.edu/academics/college-creative-arts-and-communication/dana-school-of-music/admission/) and examinations are on announced dates, typically during the spring of prospective students’ senior year in high school.

Admission to Courses for the Degree of Bachelor of Music
The applicant’s high school courses should include the preparatory courses specified under Undergraduate Catalog’s Application and Admission Examinations (p. 19) section of the Undergraduate Catalog.

Musical Proficiency
Before entering YSU and the Dana School, it is expected that prospective students will be proficient in one or more areas of applied music (i.e., performance, music recording, composition), as certain standards in technique and repertory must be met. Qualifications are determined by the placement tests mentioned above. Students who do not demonstrate the proficiency required to enroll in major-level lessons must enroll in the relevant minor-level lessons until they are ready to begin major-level lessons.

The Dana School of Music theory placement examination is used to determine theory proficiency. Those scoring less than the 80th percentile will take MUTC 1531N Music Theory 1 Intensive, while those scoring above the 80th percentile will enroll in MUTC 1531 Music Theory 1.

Prospective composition majors must present evidence of ability to handle the materials of music by placing at or above the 80th percentile on the Dana School of Music theory entrance examination. Proficiency on a musical
instrument sufficient for admission to the freshman level of applied music must be demonstrated in an audition for the appropriate faculty.

Admission from Other Institutions
The general policy is stated on the YSU Admissions Transfer Students website (https://ysu.edu/admissions/apply-to-ysu/transfer-students/). Advanced standing in musical performance and in music theory is granted tentatively but must be validated by an audition and appropriate examinations (e.g., theory).

Requirements for the Degree Bachelor of Music
It is the student's responsibility to insure that all graduation requirements for the degree sought are satisfied. If students average 16-18 hours per semester, these degrees may be earned in eight semesters. For the Bachelor of Music degree, these consist of:

Pre-college or preparatory study, of two kinds
1. Academic. These courses are normally taken in high school. All deficiencies must be satisfied prior to completing 60 semester hours at YSU.
2. Musical. A student lacking suitable proficiency in applied studies must develop it before undertaking the required college-level music courses.

University Requirements
Non-music courses and other requirements to be completed are listed in the Curriculum Sheet (https://catalog.ysu.edu/undergraduate/colleges-programs/college-creative-arts-communication/school-music/#programsofstudystext) of each degree program. An overview of YSU’s General Education program and lists of courses by domain may be found here (https://catalog.ysu.edu/undergraduate/general-information/academic-policies-procedures/general-education-requirements/#text).

Degree Requirements
All music majors must attend 36 Convocations and 30 Dana School of Music concerts or recitals. During the semester, Convocation meets every Friday (11:00-11:50) in Bliss Recital Hall. Attendance at 36 convocations is recommended in the first two years and required for degree completion. Attendance at 30 recitals is mandatory in the first two years. Students are asked to save printed programs from any recitals or concerts they attend as evidence of their presence.

Double Major: Music Performance and Music Education
Students who wish to complete a major (Bachelor of Music or Bachelor of Arts degree) in an instrument or in voice, theory, or composition and also a major in music education, should consult the Director of the Dana School of Music.

Although the Dana School of Music offers a variety of degrees and majors in music, it is our desire that all music students have significant musical experiences as a foundation for more specialized training.

Curricular
For All Music Majors
Acceptance into a performance area is contingent upon an audition (http://www.ysu.edu/academics/college-creative-arts-communication/dana-school-of-music/admission/). Students who do not qualify for major-level lessons (e.g., PIAN 1501, FLUT 1501) may take the relevant minor-level lessons (e.g., PIAN 1500A, FLUT 1500A) until the deficiency is corrected.

After an examination given by members of the faculty, advanced standing in performance may be granted tentatively (e.g., for transfer students). The final classification is made at the end of the first semester of resident study.

Enrollment in private lessons is contingent upon the approval of the Director of the Dana School of Music, with priority given to full-time music majors and music minors participating in major ensembles.

Teacher Assignment for applied lessons
Assignment of students to teachers for applied music lessons is made by the area coordinator. Requests for change of teacher should be addressed to the coordinator in writing. To the extent possible, a student’s choice of applied teacher will be taken into consideration but final assignment resides with the Director of the School of Music.

Lessons
Students registered for 4 s.h. courses receive 50-minutes of individual instruction and one 50-minute seminar weekly; they are required to practice three hours daily. Students registered for 2 and 3 s.h. courses receive 50-minutes of individual instruction and one 50-minute seminar weekly; they are required to practice two hours daily. Students registered for minor-level lessons receive individual instruction for 30 minutes each week and are required to practice one hour daily.

If a student misses more than three lessons in any semester, no credit will be given in applied lessons. Lessons missed due to legal holidays or school closings will not be rescheduled. In the case of prolonged student illness, the lessons may be rescheduled at the discretion of the applied teacher.

Recitals
Recognizing that performing for an audience plays a vital role in musical and artistic growth, the Dana School offers its students many opportunities to perform in public as a way to foster that development. Attendance at 30 recitals is mandatory in the first two years.

Convocation
The Assistant Director of the School arranges weekly programs of lectures and student and faculty performances. Attendance at 36 convocations is recommended in the first two years and required for degree completion.

Young Artist Competition
An annual concert by the Dana Symphony Orchestra features student soloists chosen by competition.

Dana Young Scholars Award
Dana Young Scholars Award celebrates student research in music. The competition is open to all graduate students as well as undergraduate students, at the sophomore level or higher, who are pursuing a music degree in the Dana School of Music.

Degree and Non-degree Recitals
In partial fulfillment of graduation requirements, each candidate for the Bachelor of Music degree must present a senior recital. Performance majors must present a half-hour recital their junior year and a one-hour recital their senior year. Composition majors must present 75 minutes of music, and music education majors a half-hour recital of music. Outstanding students may present non-degree recitals, subject to certain conditions; for more information, students should talk with their studio faculty. Student recitals should include a varied and balanced repertoire, preparation of a printed program and program notes, and consideration of performance aspects such as attire, stage deportment, and marketing to an audience. No later than 21 days prior to the projected recital date, a recital hearing will be held. During that time, a student who plans to present a degree recital must be prepared to perform the recital program for faculty approval.

Examinations
During examination week of each term, performance faculty members convene to determine if students may proceed to the next higher proficiency level of applied study. Frequency of required examinations differs among the various performance areas (for specifics, consult the syllabus of the performance area concerned). Transfer students are examined at the end of their first or second term of study, as established by the individual performance area. Students
presenting an approved degree recital may be granted a waiver of examination for the term of the recital. Students who have earned a grade of C or lower, or with a grade of PR, may be retained in the same proficiency level. Students who fail to meet the standards of the examining faculty may be required to reduce the number of credits for which they register in subsequent terms or withdraw completely from the course sequence.

To meet certain needs, each applied area (e.g., keyboard, brass, strings) may vary the above requirements. For details, consult with the appropriate area coordinator.

For more information, visit the Dana School of Music (http://www.ysu.edu/academics/college-creative-arts-and-communication/dana-school-of-music/).

Ensembles
There are two types of ensembles in the Dana School of Music:

• large ensembles
• chamber ensembles

Large ensembles rehearse a total of three or four hours per week, and chamber ensembles rehearse for one to two hours per week.

**Large Ensembles**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUEN 0002</td>
<td>Dana Chorale</td>
<td>1</td>
</tr>
<tr>
<td>MUEN 0003</td>
<td>Dana Madrigal</td>
<td>1</td>
</tr>
<tr>
<td>MUEN 0004</td>
<td>University Chorus</td>
<td>1</td>
</tr>
<tr>
<td>MUEN 0005</td>
<td>Concert Band</td>
<td>1</td>
</tr>
<tr>
<td>MUEN 0006</td>
<td>Marching Band</td>
<td>1</td>
</tr>
<tr>
<td>MUEN 0007</td>
<td>Wind Ensemble</td>
<td>1</td>
</tr>
<tr>
<td>MUEN 0008</td>
<td>Symphony Orchestra</td>
<td>1</td>
</tr>
<tr>
<td>MUEN 0023</td>
<td>Jazz Ensemble</td>
<td>1</td>
</tr>
<tr>
<td>MUEN 0040</td>
<td>University Band (spring only)</td>
<td>1</td>
</tr>
</tbody>
</table>

**Chamber Ensembles**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUEN 0009</td>
<td>Percussion Ensemble</td>
<td>1</td>
</tr>
<tr>
<td>MUEN 0010</td>
<td>String Ensemble</td>
<td>1</td>
</tr>
<tr>
<td>MUEN 0012</td>
<td>Dana Opera Ensemble</td>
<td>1</td>
</tr>
<tr>
<td>MUEN 0013</td>
<td>Contemporary Ensemble</td>
<td>1</td>
</tr>
<tr>
<td>MUEN 0014</td>
<td>Women's Chorus</td>
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<tr>
<td>MUEN 0015</td>
<td>Early Music Ensemble</td>
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</tr>
<tr>
<td>MUEN 0016</td>
<td>Woodwind Ensemble</td>
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</tr>
<tr>
<td>MUEN 0017</td>
<td>Horn Choir</td>
<td>1</td>
</tr>
<tr>
<td>MUEN 0018</td>
<td>Trombone Ensemble</td>
<td>1</td>
</tr>
<tr>
<td>MUEN 0020</td>
<td>Tuba Ensemble</td>
<td>1</td>
</tr>
<tr>
<td>MUEN 0021</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>MUEN 0022</td>
<td>Trumpet Ensemble</td>
<td>1</td>
</tr>
<tr>
<td>MUEN 0024</td>
<td>Composer's Ensemble</td>
<td>1</td>
</tr>
<tr>
<td>MUEN 0026</td>
<td>Chamber Orchestra</td>
<td>1</td>
</tr>
<tr>
<td>MUEN 0028</td>
<td>Chamber Winds</td>
<td>1</td>
</tr>
<tr>
<td>MUEN 0029</td>
<td>Guitar Ensemble</td>
<td>1</td>
</tr>
<tr>
<td>MUEN 0030</td>
<td>Jazz Combo</td>
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<td>MUEN 0035</td>
<td>Saxophone Quartet</td>
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<tr>
<td>MUEN 0041</td>
<td>Basketball Pep Band (spring only)</td>
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<tr>
<td>MUEN 0051</td>
<td>Piano Chamber</td>
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Ensemble courses are open to all students in the University who are qualified for them and any ensemble course may be repeated any number of semesters.

Requirements in addition to the above but unique to each ensemble:

• Dana Opera Ensemble 0012 culminates in the production of one or more operas. Credit is given in accordance with the amount of work chosen by the student, ranging from 1-3 s.h.
• Woodwind and brass ensembles may include quartets, quintets, and various other combinations of instruments. 1 s.h. each.

For additional information, visit the Dana School of Music (http://www.ysu.edu/academics/college-creative-arts-and-communication/dana-school-of-music/).

Professor

Ewelina Boczkowska, Ph.D., Associate Professor

Kivie Cahn-Lipman, D.M.A., Assistant Professor

Kent J. Engelhardt, Ph.D., Professor

Francois P. Fowler, D.M., Professor

Stephen L. Gage, Ed.D., Professor

Randall E. Goldberg, Ph.D., Associate Professor, Acting Co-Director

Daniel Keown, Ph.D., Associate Professor

Christopher Krummel, D.M.A., Professor

Hae-Jong Lee, D.M.A., Associate Professor

J. Paul Louth, Ph.D., Associate Professor

Andrew Mitchell, D.M.A., Assistant Professor

David S. Morgan, D.M.A., Professor

Allan Mosher, D.M.A., Professor

Caroline Oltmanns, D.M.A., Professor

Phyllis Paul, Ph.D., Professor

Brandt Payne, D.M.A., Associate Professor

Steven M. Reale, Ph.D., Professor

Jena Root, Ph.D., Professor

Glenn Schaft, D.M.A., Professor

James C. Umble, D.M.A., Professor

Kathryn T. Umble, D.M.A., Professor

Alice M. Wang, D.M.A., Professor

Cicilia Yudha, D.M.A., Associate Professor

Misook Yun, D.M.A., Professor

Lecturer

Wendy S. Case, D.M.A., Lecturer

Maria Fenty Denison, D.M.A., Lecturer

Sean Yancer, B.M.E., Lecturer
Majors

- Bachelor of Arts in Music, Applied Music Emphasis (p. 294)
- Bachelor of Arts in Music, Music History Emphasis (p. 296)
- Bachelor of Arts in Music, Music Theory Emphasis (p. 297)
- Bachelor of Arts in Music, Nonprofit Leadership Emphasis (p. 298)
- Bachelor of Music in Composition (p. 293)
- Bachelor of Music in Education, Instrumental Emphasis (p. 300)
- Bachelor of Music in Education, Keyboard Emphasis (http://catalog.ysu.edu/undergraduate/colleges-programs/college-creative-arts-communication/school-music/bm-education-keyboard-emphasis/)
- Bachelor of Music in Education, Voice Emphasis (p. 304)
- Bachelor of Music in Performance, Instrumental Emphasis (p. 308)
- Bachelor of Music in Performance, Jazz Emphasis (p. 309)
- Bachelor of Music in Performance, Organ Emphasis (p. 310)
- Bachelor of Music in Performance, Piano Emphasis (p. 311)
- Bachelor of Music in Performance, Voice Emphasis (p. 313)
- Bachelor of Music with an Emphasis in Music Recording (p. 306)

Minors

- Music Minor (p. 314)

Music Applied Classes

MUAC 1521 Keyboard Musicianship for Non-Music Majors 1 1 s.h.
Intended for the student with no previous music studies, this first-semester course develops fundamental piano playing, through the study of music fundamentals and repertoire.

MUAC 1522 Keyboard Musicianship for Non Music Majors 2 1 s.h.
Continuation of MUAC 1521. Intended for the student with no previous music studies, this second-semester course develops fundamental piano playing, through the study of music fundamentals and repertoire.
Prereq.: MUAC 1521 or permission of instructor.

MUAC 1556 Singer’s Diction: English/Italian 1 s.h.
Application of the principles of Lyric diction; utilization of the International Phonetic Alphabet in developing and reading phonetics transcriptions of English, Italian song texts.

MUAC 1557 Singer’s Diction: German 1 s.h.
Application of the principles of Lyric diction; utilization of the International Phonetic Alphabet in developing and reading phonetics transcriptions of German song texts.

MUAC 1558 Singer’s Diction: French 1 s.h.
Application of the principles of Lyric diction; utilization of the International Phonetic Alphabet in developing and reading phonetics transcriptions of French song texts.

MUAC 1581 Class Piano 1 1 s.h.
Intended for and required of all non-keyboard music majors, the first-semester course builds functional skills at the piano. Students develop techniques to perform all major scales and arpeggios, sight reading, triads and inversion, primary chords, harmonization of popular and/or folk tunes, and repertoire with both hands.
Coreq.: Major-level applied lessons (1501 or higher) or permission of coordinator.

MUAC 1582 Class Piano 2 1 s.h.
Continuation of MUAC 1581 and required of all non-keyboard music majors. Students hone piano techniques by performing major and minor scales and arpeggios, score analysis, transposition, harmonization of popular and/or folk tunes with extended chords, and solo/ensemble repertoire with both hands.
Prereq.: grade of “C” or better in MUAC 1581.
Coreq.: Major-level applied lessons (1501 or higher), placement test, or permission of coordinator.
MUAC 3733 Woodwind Methods 1 s.h.
Designed to prepare students for instrumental music teaching relative to woodwind instruments (flute, clarinet, oboe, bassoon, saxophone). Components include concepts of tone production, embouchure, articulation, and technique. Study material stresses common features as well as differences.
Prereq.: MUTC 1531 or MUTC 1531N or permission of instructor.

MUAC 3734 String Methods 1 s.h.
Designed to prepare students for instrumental music teaching relative to string instruments (violin, viola, cello, string bass). Components include concepts of tone production, bowing, fingering as well as appropriate evaluation of pedagogy. Study material stresses common features as well as differences. 
Prereq.: MUTC 1531 or MUTC 1531N or permission of the instructor.

MUAC 3735 Jazz Methods 1 s.h.
Designed to prepare students for jazz teaching relative to instruments and voice. Components include fundamental techniques and approaches for directing small and large jazz ensembles, teaching of basic improvisation skills, rhythms section/sooloist interaction, and stylistic interpretation. Students will demonstrate basic performance proficiencies in jazz on their applied instruments and/or voices. Meets 2 hours per week.
Prereq.: MUTC 1531 or MUTC 1531N or permission of the instructor.

MUAC 3755 Guitar Methods 1 s.h.
Study of the guitar at the beginning level to explore techniques and approaches appropriate to school music instruction. A minimum level of performance is required.
Prereq.: EDFN 1501.

MUAC 3759 Voice Class 1 s.h.
A study of voice at the beginning level to explore techniques and approaches appropriate to school music instruction. A minimum level of performance is required. May be repeated.
Prereq.: MUTC 1531 or MUTC 1531N or permission of the instructor.

MUAC 3763 Percussion Methods 1 s.h.
Study of snare drum, marching percussion, timpani, jazz drum set, keyboard, Latin percussion, and orchestral accessories. Topics include instrument selection and maintenance techniques as well as pedagogical approaches. Designed to prepare students for instrumental music teaching careers.
Prereq.: MUTC 1531 or MUTC 1531N or permission of the instructor.

MUAC 3781 Jazz Class Piano 1 1 s.h.
(For keyboard and non-keyboard majors). Class instruction and keyboard experience in jazz chordal voicing techniques including shell voicings and open voicings. Techniques will be applied to blues and jazz repertoire including performance of melodies, rhythmic accompaniments, and improvised comping. Classes must be taken in sequence. Meets two days per week.
Prereq.: grade of “B” or better in MUAC 1582 or permission of instructor.

MUAC 3782 Jazz Class Piano 2 1 s.h.
For keyboard and non-keyboard majors). Class instruction and keyboard experience in jazz chordal voicing techniques including a study of open voicings using altered dominants and quartal voicings. Techniques will be applied to blues and jazz repertoire including performance of melodies, rhythmic accompaniments, and improvised comping. Meets two days per week.
Prereq.: MUAC 3781, or permission of instructor.

MUAC 4867 Jazz Improvisation 3 3 s.h.
Advanced jazz techniques with emphasis on analysis of harmonic progressions, form, style, and performance requirements of the jazz idiom. Courses must be taken in sequence.
Prereq.: MUAC 2668.

MUAC 4868 Jazz Improvisation 4 3 s.h.
Advanced jazz techniques with emphasis on analysis of harmonic progressions, form, style, and performance requirements of the jazz idiom. Courses must be taken in sequence.
Prereq.: MUAC 2668.

Music Conducting

MUAC 3715 Choral and Instrumental Conducting 3 s.h.
Designed to develop skills, hone competencies, and share conceptual knowledge relative to the art and pedagogy of conducting. Students develop skills in conducting, score analysis and preparation, rehearsal techniques, and error detection, and create artistic interpretation with peer-lab ensemble.
Prereq.: MUTC 2632.

Music Education

MUED 2611 Computer Applications in Music Education 2 s.h.
An overview of computer applications as they relate to the music educator. Specific hardware and software in music education will be discussed. Project topics: administrative software, music notation, MIDI, arranging and improvisation with computers, and designing multimedia. Meets two hours per week.
Prereq.: MUTC 1532 or MUTC 1532N.

MUED 2622 Foundations of Music Education 2 s.h.
Introduction to the principles and current practices of teaching music in K-12 settings. Strategies and approaches to teaching music of various genres with emphasis on the unique challenges of public school music instruction in the 21st Century. Includes 15 hours of exploratory fieldwork. Topics include assessment, curricular design, student engagement, classroom management, and multiculturalism.

MUED 2622 Music in Early Childhood 3 s.h.
Fundamental skills, repertoire, materials, and techniques for teaching music to pre-kindergarten through third grade children. For non-music majors.
Prereq.: CHFM 2633.

MUED 4821 Instrumental Music Education 2 s.h.
Materials, methods and literature for teaching elementary, middle school, and high school instrumental music programs. Emphasis on curriculum design, pedagogy, orchestration/arranging techniques, and learning theories related to jazz, concert, marching band, and orchestra. Requires 5 hours of field experience.
Prereq.: MUED 2622 and upperdivision status in the College of Education.

MUED 4822 Teaching Choral Music 2 s.h.
Materials, methods and literature for school vocal ensembles. Additional emphasis is on vocal pedagogy, curriculum design, score study, adolescent voice, vocal literacy, arranging techniques, vocal improvisation, programming, designing and implementing choreography in vocal ensembles, and current issues in vocal music education. Requires 5 hours of field experience.
Prereq.: MUED 2622 and upperdivision status in the college of education.

MUED 4823 Music Teaching in Early Childhood (Pre K-3) 2 s.h.
Course emphasizes strategies, curriculum development, materials, classroom management, and developmentally appropriate practices for teaching diverse populations of pre K through third grade students. Candidates design and implement lessons aligned to state standards, based on established methods (Orff, Kodály, Dalcroze) in simulated and authentic settings. Requires 10 hours of field experience.
Prereq.: Upper division status in the college of education.

MUED 4824 Music Teaching in the Middle School 2 s.h.
Music materials and methods of instruction in middle schools with emphasis on understanding the physiological and psychological development of early adolescents in the context of general music classes. Course content includes managing the learning environment, motivating students, developing music curricula, planning musical experiences and assessing musical behaviors. Requires 12 hours of field experience.
Prereq.: MUED 4821 or MUED 4822 or concurrent enrollment, and upper division status in the college of education.
MUED 4825 Music Teaching in the High School  2 s.h.
Methods of organizing, administering, teaching, and conducting music in the high schools; instruction methods, curriculum, technology, scheduling, philosophy, classroom management, and applying learning theories and research to practice. Special focus on designing and implementing standards-based music objectives in both instrumental and vocal rehearsal settings. Requires 10 hours of field experience.
Prereq.: Upper-division status in the College of Education and either MUED 4821 or MUED 4822, plus concurrent enrollment in or completion of MUCO 3715.

MUED 4842A Student Teaching Seminar for Music Education  2 s.h.
Seminar topics are based on research and theory related to music pedagogy, classroom management, cultural bias, academic language, differentiation, collaboration, and reflection. Examination of OSTP standards, NASM standards and professional ethics.
Prereq.: Passage of OAE Music Content Exam & APK, BCI/FBI background check, Upper Division status in the CCCAC, completion of all music program requirements (including graduation recital) except student teaching.
Coreq.: MUED 4844.

MUED 4844 Supervised Student Teaching: Music (K-12)  10 s.h.
Sixteen weeks supervised student teaching experience in K-12 music settings. Corequisite MUED 4842A.
Prereq.: Passage of OAE Music Content Exam and APK, BCI/FBI background check, CCCAC Upper Division Status, completion of all other requirements in the program including graduation recital.
Coreq.: MUED 4842A.

MUED 5814 Selected Topics in Music Education  2 s.h.
Course title will be listed each semester in the Schedule of Classes. May be repeated for credit with different topics.
Prereq.: MUED 4823 or MUED 4825.

MUED 5841 Music Workshop  1-3 s.h.
For students and teachers in service; topics may vary from year to year. Specific topics are announced each time the workshop is offered. May be repeated with different topic.

MUED 5858 Piano Pedagogy  3 s.h.
Methods and materials involved in teaching piano in private and classroom settings. Fundamentals of technique as well as repertoire. Supervised practice teaching.
Prereq.: Two years of applied keyboard.

MUED 5880 Vocal Pedagogy  1 s.h.
A comparative study of physiological and psychological approaches to voice instruction and their application to private and class instruction.
Prereq.: Two years of applied voice classes.

Music Ensembles

MUEN 0002 Dana Chorale  1 s.h.
Dana Chorale.

MUEN 0003 Dana Madrigal  1 s.h.
Dana Madrigal.

MUEN 0004 University Chorus  1 s.h.
An entry-level ensemble designed for music majors and non-music students alike. Students are placed within the ensemble after an informal hearing with the conductor. Each singer must be devoted to producing their highest quality of performance through both individual study, and group rehearsals, of the music being prepared. Study, rehearsals (tutti, individual, and sectional), memorization and performances in public comprise the course of study.

MUEN 0005 Concert Band  1 s.h.
Concert Band.

MUEN 0006 Marching Band  1 s.h.
Marching Band.

MUEN 0007 Wind Ensemble  1 s.h.
Wind Ensemble.

MUEN 0008 Symphony Orchestra  1 s.h.
Symphony Orchestra.

MUEN 0009 Percussion Ensemble  1 s.h.
Percussion Ensemble.

MUEN 0010 String Ensemble  1 s.h.
String Ensemble.

MUEN 0011 Men's Chorus  1 s.h.
Men's Chorus.

MUEN 0012 Dana Opera Ensemble  1 s.h.
Opera Ensemble.
Prereq.: By audition and by permission of instructor and voice teacher only.

MUEN 0013 Contemporary Ensemble  1 s.h.
Contemporary Ensemble.

MUEN 0014 Women's Chorus  1 s.h.
Women's Chorus.

MUEN 0015 Early Music Ensemble  1 s.h.
Early Music Ensemble.

MUEN 0016 Woodwind Ensemble  1 s.h.
Woodwind Ensemble.

MUEN 0018 Horn Choir  1 s.h.
Horn Choir.

MUEN 0019 Trombone Ensemble  1 s.h.
Trombone Ensemble.

MUEN 0020 Tuba Ensemble  1 s.h.
Tuba Ensemble.

MUEN 0022 Trumpet Ensemble  1 s.h.
Trumpet Ensemble.

MUEN 0023 Jazz Ensemble  1 s.h.
Jazz Ensemble.

MUEN 0024 Composer's Ensemble  1 s.h.
Composer's Ensemble.

MUEN 0025 Gospel Choir  1 s.h.
A choral music performance group whose repertoire focuses on African American Gospel music and the culture in which it was created. Musical styles will encompass Spirituals through Contemporary Gospel. Meets 2 hours per week. Open to all YSU students.

MUEN 0026 Chamber Orchestra  1 s.h.
Chamber Orchestra.

MUEN 0027 Musical Theater Ensemble  1 s.h.
Ensemble experience in staged musical productions including performance and pedagogy in ensemble precision, rhythm section techniques, and musical style.
Prereq.: Audition.

MUEN 0028 Chamber Winds  1 s.h.
Chamber Winds.

MUEN 0029 Guitar Ensemble  1 s.h.
Guitar Ensemble.

MUEN 0030 Jazz Combo  1 s.h.
Jazz Combo.
Music History and Literature

MUHL 2616 Survey of Jazz 3 s.h.
A historical survey of the origins, influences, and stylistic features of jazz from its beginnings to the present, with emphasis on performers, compositions, and innovations.
Gen Ed: Arts and Humanities.

MUHL 2617 Film Music 3 s.h.
A historical survey of the use of music in the motion picture. Examination of different styles in works by major composers.
Gen Ed: Arts and Humanities.

MUHL 2618 Rock n’ Roll to Rock 3 s.h.
A historical survey of the evolution of rock n’ roll into rock with emphasis on the interrelationships of the music and social and political influences and the interaction of rock with other musical styles.
Gen Ed: Arts and Humanities.

MUHL 2619 Music of Non-Western Societies 3 s.h.
A historical survey of music as it relates to the different cultures, with emphasis on the development of instruments, vocal practices and performance media within specific cultures.
Gen Ed: Arts and Humanities, International Perspectives, Social and Personal Awareness.

MUHL 2620 Music of African Americans 3 s.h.
The study of African American musical genres from slavery to the present with focus on stylistic features, innovations, and the culture in which they were created. Topics may include Folk Music, Blues, Gospel, Ragtime, Jazz, Musical Theatre, Art/Classical Music, Rhythm & Blues, Funk, Disco and House, Techno, Hip-Hop, Rap, Gender Issues, Popular Music Industry, and Musical Agency.

MUHL 2621 Music Literature and Appreciation 3 s.h.
The development of listening techniques applicable to Western and non-Western music through the comparison and contrast of the music of significant historical periods. For non-music majors.
Gen Ed: Arts and Humanities, International Perspectives, Social and Personal Awareness.

MUHL 2622 Popular Music in America 3 s.h.
The changing styles in American popular music from its origins to the present day studied through an examination of representative compositions and performers.
Gen Ed: Arts and Humanities.

MUHL 2623 Core Concepts of Music 1 s.h.
Introduction to the study of music and culture. Basic parameters of music and its function in society are explored. Two MUEN large ensembles other than Marching Band must be taken in addition to this course to satisfy the requirements for GER credit. 1 s.h.

MUHL 2624 Survey of Hip Hop 3 s.h.
An historical survey of Hip Hop music from its origins through the early 21st Century.
Gen Ed: Arts and Humanities.

MUHL 3771 Music History and Literature 1 3 s.h.
An introduction to the intersection of music and culture. Students will explore the cultural contexts and the social, economic, and technological forces that influence the creation and dissemination of music. In addition to the core content of the class, students will be introduced to parallel narratives in the visual arts, literature, and theater. Students will demonstrate, through examination and written assignments, their understanding of how music history is a function of cultural values and choices.
Prereq.: sophomore standing.
Gen Ed: International Perspectives, Social and Personal Awareness.

MUHL 3772 Music History and Literature 2 3 s.h.
An introductory history of musical culture in Europe from Antiquity to 1750 C.E. Students will study the important composers and musical genres and the cultural contexts and social forces that influence the creation and dissemination of music. In addition to the core content of the class, students will be introduced to parallel narratives in the visual arts, literature, and theater. Students will demonstrate, through examination and written assignments, their understanding of how music history is a function of cultural values and choices.
Prereq.: sophomore standing and MUHL 3771 or permission of instructor.
Gen Ed: Arts and Humanities.

MUHL 3773 Music History and Literature 3 3 s.h.
An introductory history of musical culture in Europe from 1750 C. E. to the present. Students will study the important composers and musical genres and the cultural contexts and social forces that influence the creation and dissemination of music. In addition to the core content of the class, students will be introduced to parallel narratives in the visual arts, literature, and theater. Students will also demonstrate, through examination and written assignments, their understanding of how music history is a function of cultural values and choices.
Prereq.: sophomore standing and MUHL 3772 or permission of instructor.
Gen Ed: Arts and Humanities.

MUHL 3774 Music History and Literature 4 3 s.h.
A historical survey of music in America. Students will study the important composers and musical genres and the cultural contexts and social forces that influence the creation and dissemination of music. In addition to the core content of the class, students will be introduced to parallel narratives in the visual arts, literature, and theater. Students will also demonstrate, through examination and written assignments, their understanding of American musical styles and how they have developed within America's unique historical context, demographics, and social structures.
Prereq.: sophomore standing and MUHL 3773 or permission of instructor.
Gen Ed: Arts and Humanities.
MUHL 3775  Jazz History  3 s.h.
Students will study and develop an understanding of jazz origins, influences, performers, compositions, and stylistic features from the turn of the century to the present. This will include study of early jazz, the swing era, bebop, cool, hard bop, post bop, modal music, modal chromatic music, free jazz, and fusion. 
Prereq.: sophomore standing or permission of the instructor.

MUHL 3787  History and Appreciation of Art and Music  3 s.h.
(General) Illustrated lectures on art and music to develop the cultural growth of the non-art and non-music student. Art and music forms, comparisons of compositional styles, and discussion of the developments, influences, and experiments of the important periods to date. No prior training in art or music required. Not intended for Art majors. Listed also as ART 3787.

MUHL 5860  Keyboard Literature  3 s.h.
An investigation of the solo keyboard works of major composers from the earliest times to the present day.
Prereq.: MUTC 2632.

MUHL 5871  Baroque Music  3 s.h.
The evolution of musical styles during the period 1600-1750. A historical survey of documents and music literature of the time: opera from Monteverdi to Handel; keyboard and instrumental works; significant choral works, etc. 
Prereq.: MUTC 2632, MUHL 3771, MUHL 3772, MUHL 3773, and MUHL 3774.

MUHL 5872  Eighteenth Century and the Viennese Classical School  3 s.h.
Musical developments from the decline of the baroque to the turn of the century; historical and stylistic elements contributing to the rise of classicism and culminating in the works of Mozart, Haydn, Beethoven. 
Prereq.: MUTC 2632, MUHL 3771, MUHL 3772, MUHL 3773 and MUHL 3774.

MUHL 5873  Opera History  3 s.h.
A historical survey of opera: its development as an art form from its beginnings to the present. 
Prereq.: MUTC 2632, MUHL 3771, MUHL 3772, MUHL 3773 and MUHL 3774.

MUHL 5874  Nineteenth Century  3 s.h.
Musical developments from Beethoven through Wagner; aesthetic, formal, technical and historical trends with special emphasis on nationalism and the music drama. 
Prereq.: MUTC 2632, MUHL 3771, MUHL 3772, MUHL 3773, and MUHL 3774.

MUHL 5878  Selected Topics in Music History  3 s.h.
A study of a specific topic to be announced each time the course is offered. May be repeated once with different topic. 
Prereq.: MUTC 2632, MUHL 3771, MUHL 3772, MUHL 3773, and MUHL 3774.

MUHL 5879  Vocal Literature  3 s.h.
A study of vocal literature from all periods. Special emphasis on English language repertoire and on material especially suitable for high school students. Songs are prepared for performance in class. 
Prereq.: MUTC 2632, MUHL 3771, MUHL 3772, MUHL 3773 and MUHL 3774.

Music Industry

MUIN 1561  Music Recording Workshop  4 s.h.
Introduction to the music recording process and the recording studio. An overview of music recording grounded in history and the principles of acoustics. An exploration of analog and digital technology involved in music recording. Two hours lecture, two hours lab.

MUIN 3700  Survey of Music Industry  2 s.h.
A general overview of the major functional areas of the music industry, with attention to the theoretical foundations and practical application of current business practices in the music industry.
Prereq.: Junior standing or permission of instructor.

MUIN 3762  Digital Sound Production  2 s.h.
An overview of MIDI and electronic musical instrument technology. Sequencers and mixing in the MIDI environment. Basic compositional techniques using MIDI and the computer and the application of MIDI in the music recording environment.
Prereq.: MUIN 1561.

MUIN 3763  Digital Recording and Editing  2 s.h.
A study of both linear and non-linear music recording and editing various hardware and software options, as well as the production of recording projects in both domains. 
Prereq.: MUIN 1561.

MUIN 3764  Advanced Microphone Techniques  2 s.h.
Investigation of the characteristics of different microphones, microphone design, microphone selection, and microphone placement. The accessories of various miking situations will be investigated. Experiments with different microphone techniques in both the analogue and digital domains. 
Prereq.: MUIN 3763.

MUIN 3765  Advanced Recording Techniques  2 s.h.
Investigates advanced elements of music recording from the recording session procedures to product manufacture. Advanced techniques in noise reduction, amplification, sound compression, and synchronization. 
Prereq.: MUIN 3764.

MUIN 4866  Recording Internship  3 s.h.
Practicum in appropriate music recording environments. Addresses all aspects of the music recording industry. Students meet once a week on campus to share and discuss experiences from the intern position. A minimum of 12 hours per week will be spent in the field. 
Prereq.: MUIN 3765 and senior standing in music recording.

MUIN 4867  Senior Project  4 s.h.
Independent student project to showcase skills and techniques learned in the content courses. Presentation of project in a public exhibition required. 
Prereq.: MUIN 3765 and senior standing in music recording.

Music Theory and Composition

MUTC 1520  Materials of Music  3 s.h.
Musical styles, listening concepts, and harmonic techniques as they relate to the literature of music. For students who do not qualify for MUTC 1531 or MUTC 1531N.

MUTC 1531  Music Theory 1  2 s.h.
Prereq.: Music majors who have completed a successful audition for the Dana School of Music, and have achieved 80% or higher on the Theory Placement Exam, or permission of the instructor.

MUTC 1531N  Music Theory 1 Intensive  3 s.h.
Intensive section of Music Theory 1. Music fundamentals, including pitch notation in treble and bass clefs, major and minor scales and key signatures, rhythm and meter, intervals and triads. Principles of harmonic progression with diatonic chords in common-practice and popular styles. Introduction to analysis and phrase structure. 
Prereq.: Music major, having achieved a successful audition for the Dana School of Music.

MUTC 1532  Music Theory 2  2 s.h.
The second of four courses in the Music Theory sequence. Review of four-part writing and analysis. Non-harmonic tones, expanding harmonic functions with diatonic triads and seventh chords, six-four chord techniques. 
Prereq.: grade of "C" or better in both MUTC 1531 and MUTC 1541.

MUTC 1532N  Music Theory 2 Intensive  3 s.h.
Intensive section of Music Theory 2. Introduction to two-part counterpoint and four-voice writing with diatonic, root-position triads. Non-harmonic tones, expanding harmonic functions with diatonic triads and seventh chords, six-four chord techniques. 
Prereq.: Grade of "C" or better in MUTC 1531N and MUTC 1541.
MUTC 1541 Aural Theory 1 2 s.h.
Dictation exercises including solfège patterns, bass line recognition, melody with simple rhythm, and 2-part counterpoint examples. Sight-singing including simple diatonic melodies, duets, chord-singing, and improvisation. Keyboard exercises including solfège patterns, play-and-sing, and transposition exercises. Solfège drills to build and maintain fluency with the solfège system.
Prereq.: Music majors who have completed a successful audition for the Dana School of Music.

MUTC 1542 Aural Theory 2 2 s.h.
Sight-singing diatonic and chromatic melodies. Aurally recognize and sing all diatonic triads and seventh chords. Diatonic and chromatic melodic dictation. Dictation and singing of diatonic chord progressions. Dictation of diatonic two-voice counterpoint in both strict species and free styles Mastery of cadential patterns and voice-leading at the keyboard.
Prereq.: Grade of "C" or better in both MUTC 1531 (or MUTC 1531N) and MUTC 1541.

MUTC 2631 Music Theory 3 2 s.h.
The third of three courses in the Music Theory sequence. Continued mastery of basic voice-leading. Chromatic harmony including secondary dominants, modulations, modal mixture, and augmented sixths. Study of small and large classical forms.
Prereq.: Grade of "C" or better in both MUTC 1532 or MUTC 1532N and MUTC 1542.

MUTC 2632 Music Theory 4 2 s.h.
Advanced chromaticism, including chromatic and enharmonic modulation, extended tertenian structures, chromatic mediants, altered dominants, and common tone diminished-sevenths. Early twentieth-century musical styles and model composition.
Prereq.: Grade of "C" or better in both MUTC 2631 and MUTC 2641.

MUTC 2641 Aural Theory 3 2 s.h.
Practice and mastery of advanced sight singing, aural recognition, and piano/instrumental skills. Dictation exercises including chromatic solfège patterns, chord progressions, contextual listening, and chromatic melodies. Sight-singing exercises including chromatic patterns, melodies, duets, chord-singing, and improvisation.
Prereq.: MUTC 1532 or MUTC 1532N and MUTC 1542 with grade of "C" or better.

MUTC 2642 Aural Theory 4 2 s.h.
Dictation exercises include melodies, melodic fragments, chord qualities, and harmonic progressions with enharmonic and chromatic modulations. Sight-singing exercises include melodies with advanced chromatism and post-tonal melodies. Sight-singing repertoire including four-part chorales and music from the late nineteenth and early twentieth centuries. 2 s.h.
Prereq.: MUTC 2631 and MUTC 2641 with grades of "C" or better.

MUTC 3710 Orchestration and Arranging 3 s.h.
A hands-on course in which students develop and demonstrate fundamental skills in orchestration/arranging for wind band, orchestra, and choir. Topics include standard ranges, transpositions, clefs, timbres, playability/singability, tessituras, and common techniques and devises for scoring instruments and voices. Particular focus on arranging for school ensembles.
Prereq.: MUTC 2632 or permission of instructor.

MUTC 3712 Jazz Arranging 1 3 s.h.
Scoring in the jazz idiom with emphasis on harmonic concepts, voicing procedures, form, and stylistic trends developed by major jazz composer-arrangers. Detailed study of instrumental techniques with projects scored for various size ensembles. Student arrangements are performed in reading sessions and concerts. Classes must be taken in sequence.
Prereq.: MUTC 1532 and MUAC 2668 or permission of instructor.

MUTC 3713 Jazz Arranging 2 3 s.h.
Scoring in the jazz idiom with emphasis on harmonic concepts, voicing procedures, form, and stylistic trends developed by major jazz composer-arrangers. Detailed study of instrumental techniques with projects scored for various size ensembles. Student arrangements are performed in reading sessions and concerts. Classes must be taken in sequence.
Prereq.: MUTC 1532 and MUAC 2668 or permission of instructor.

MUTC 3750 Analytical Techniques 3 s.h.
Analysis of representative repertoire from the Renaissance, Baroque, Classical, Romantic, and Contemporary periods.
Prereq.: MUTC 2632 and MUTC 2642 with grades of "C" or better.

MUTC 5821 Composition for Minors 2 s.h.
Composition in two- and three-part forms, and other compositions of small scope, such as variation and sonatina. Works are composed both for piano alone, and in combination with other instruments or voices. May be repeated by composition majors to meet requirements for freshman and sophomore composition for majors.
Prereq.: MUTC 2632 with a grade of "C" or better, or permission of instructor for composition majors.

MUTC 5822 Composition for Minors 2 s.h.
Composition in two- and three-part forms, and other compositions of small scope, such as variation and sonatina. Works are composed both for piano alone, and in combination with other instruments or voices. May be repeated by composition majors to meet requirements for freshman and sophomore composition for majors.
Prereq.: MUTC 2632 with a grade of "C" or better, or permission of instructor for composition majors.

MUTC 5830 Materials of 20th Century Music 3 s.h.
Study of the various elements of 20th century compositions, including melody, harmony, rhythm, texture, and form.
Prereq.: MUTC 2632 with a grade of "C" or better.

M.UTC 5831 Modal Counterpoint 3 s.h.
Sixteenth century contrapuntal style including introduction of species technique; analysis of liturgical and secular repertoire; writing of imitation counterpoint with stylistic rhythms and cadences.
Prereq.: MUTC 2632 with a grade of "C" or better.

MUTC 5832 Tonal Counterpoint 3 s.h.
Contrapuntal style of baroque music including an analysis of examples in imitative and invertible counterpoint; writing two- and three-part inventions and three- and four-part fugal expositions.
Prereq.: MUTC 2632 with a grade of "C" or better.

MUTC 5833 Theory Seminar 3 s.h.
Topics in music theory not covered in regular upper-division offerings. May be repeated once with different topic.
Prereq.: MUTC 2632 with a grade of "C" or better.

MUTC 5834 Electronic Music 3 s.h.
Techniques of analog and digital synthesis including tape composition, musique concrete; advanced MIDI applications such as sequencing and sampling; and digital audio editing. Composition in electronic and mixed media.
Prereq.: For composition majors, COMP 1502 or equivalent; for non-composition majors, MUTC 2632 with a grade of "C" or better; for non-majors, permission of instructor.

MUTC 5840 Instrumentation 3 s.h.
Ranges, transposition, technical characteristics, and tonal features of the instruments. Scoring for large and small ensembles which are available as laboratory reading groups.
Prereq.: MUTC 2632 with a grade of "C" or better.
### Bachelor of Music in Music Composition

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- Music students must attend 36 convocations as a graduation requirement.
- Music students must attend 30 Dana School of Music concerts or recitals.
- Applied lesson must be taken concurrently with an ensemble each semester.

### Year 1

**Fall**

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**Spring**

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Students who score below 80% on the Theory Placement Exam will substitute MUTC 1531N for MUTC 1531.
Bachelor of Arts in Performance, Vocal Track

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<td>MCMP 4803</td>
<td>Composition</td>
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<tr>
<td>MUAC 37xx (Methods Elective)</td>
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</table>

Learning Outcomes

The student learning outcomes for the major in music are as follows:

- Students will perform a public recital in their applied area.
- Students will analyze music, discriminate pitch, harmony, and rhythm and perform harmonic progressions at the piano.
- Students will demonstrate critical thinking about the various historical periods, cultural contexts, and social forces that influence musical activity.
- Students will demonstrate basic keyboard proficiency including scales, arpeggios, harmonization, repertoire, transpositions, and score reading.
- Students will compose music in a variety of genres.

Bachelor of Arts in Performance, Vocal Track

COURSE | TITLE | S.H. |
|--------|-------|------|

I. General Education Requirements

Core Competencies

<table>
<thead>
<tr>
<th>COURSE</th>
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<tbody>
<tr>
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<td>Writing 1</td>
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<tr>
<td>ENGL 1551</td>
<td>Writing 2</td>
<td></td>
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<tr>
<td>CMST 1545</td>
<td>Communication Foundations</td>
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<tr>
<td>MATH 2623</td>
<td>Quantitative Reasoning</td>
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Arts and Humanities (satisfied by 6 hours of MUHL 3771 and MUHL 3772)

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<td>Social Science</td>
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<td>Social and Personal Awareness</td>
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General Education Elective / First-Year Experience (satisfied by MUHL 3773)

Foreign Language Requirement

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II. Core Music Requirements

Music Theory: 19 hours

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<tr>
<td>MUTC 1531</td>
<td>Music Theory 1</td>
<td>4</td>
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<tr>
<td>&amp; MUTC 1541</td>
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<tr>
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<td>and Aural Theory 2</td>
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<tr>
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<tr>
<td>&amp; MUTC 2641</td>
<td>and Aural Theory 3</td>
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MUAC 37xx (Methods Elective) | 1 |

Semester Hours | 13 |

Spring

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<td>MCMG 4804</td>
<td>Composition</td>
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<tr>
<td>MUHL 3774</td>
<td>Music History and Literature 4</td>
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<tr>
<td>or MUHL 3775</td>
<td>or Jazz History</td>
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<tr>
<td>Natural Science + Lab</td>
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Total Semester Hours | 118-121 |

- Music students must attend 36 convocations as a graduation requirement.
- Music students must attend 30 Dana School of Music concerts or recitals.
- Applied lesson must be taken concurrently with an ensemble each semester.
<table>
<thead>
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<tbody>
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<td>MUTC 2642</td>
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<td>MUTC 3750</td>
<td>Analytical Techniques</td>
<td>3</td>
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<td>MUHL 3771</td>
<td>Music History and Literature 1</td>
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<tr>
<td>MUHL 3772</td>
<td>Music History and Literature 2</td>
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<td>MUHL 3773</td>
<td>Music History and Literature 3</td>
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**Music History and Literature: 12 hours**

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<td>MUHL 3773</td>
<td></td>
<td></td>
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<tr>
<td>MUHL 3774</td>
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**Keyboard Musicianship: 4 hours**

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<td>MUAC 1582</td>
<td>Class Piano 2</td>
<td>1</td>
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<tr>
<td>MUAC 2681</td>
<td>Class Piano 3</td>
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<td>MUAC 2682</td>
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**Conducting: 3 hours**

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<th>Course Title</th>
<th>Credits</th>
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<tr>
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**Applied Major: 14 hours**

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<td>1502</td>
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<td>2601</td>
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<td>2</td>
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<td>2602</td>
<td></td>
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<td>3701</td>
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<td>4801</td>
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**Large Ensembles: 5 hours**

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**Chamber Ensembles: 2 hours**

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**Minor: 18 hours (6 hours upper division)**

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**Total Semester Hours**

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Passed TPE and Audition

**Year 1**

**Fall**

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<tr>
<td>MUAC 1581</td>
<td>Class Piano 1</td>
<td>1</td>
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<tr>
<td>MUEN 00XX</td>
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<tr>
<td>VOIC 1501</td>
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**Semester Hours**

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**Spring**

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**Semester Hours**

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**Year 2**

**Fall**

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<td>Music Theory 3 &amp; Aural Theory 3</td>
<td>4</td>
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<td>MUAC 2681</td>
<td>Class Piano 3</td>
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<tr>
<td>VOIC 2601</td>
<td>Voice (or Instrument 2601)</td>
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<td>MUHL 3771</td>
<td>Music History and Literature 1</td>
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**Semester Hours**

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**Spring**

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<td>Music Theory 4 &amp; Aural Theory 4</td>
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<td>MUAC 2682</td>
<td>Class Piano 4</td>
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<tr>
<td>VOIC 2602</td>
<td>Voice (or Instrument 2604)</td>
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**Semester Hours**

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**Year 3**

**Fall**

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**Semester Hours**

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**Spring**

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<tr>
<td>MUCO 3715</td>
<td>Choral and Instrumental Conducting</td>
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**Semester Hours**

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**Year 4**

**Fall**

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<td>Music Electives</td>
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<td>Minor Course</td>
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**Semester Hours**

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**Spring**

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<td>Minor Course</td>
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<td>Foreign Language</td>
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Bachelor of Arts in Music History and Literature

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<td>YSU 1500</td>
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<tr>
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<tr>
<td>or HONR 1500</td>
<td>Intro to Honors</td>
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<tr>
<td>ENGL 1550</td>
<td>Writing 1</td>
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<tr>
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<td>ENGL 1551</td>
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<td>CMST 1545</td>
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<tr>
<td>MUTC 1531</td>
<td>Music Theory 1</td>
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<td>and Aural Theory 1</td>
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<td>Applied Lessons 2602</td>
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• Music students must attend 36 convocations as a graduation requirement.
• Music students must attend 30 Dana School of Music concerts or recitals.
• Applied lesson must be taken concurrently with large ensemble.

Year 1

Fall
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<td>3-4</td>
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<tr>
<td>MUTC 1531</td>
<td>Music Theory 1</td>
<td>4-5</td>
</tr>
<tr>
<td>&amp; MUTC 1541</td>
<td>and Aural Theory 1</td>
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<tr>
<td>MUTC 1532</td>
<td>Music Theory 2</td>
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| TOTAL SEMESTER HOURS | 123-126 |

- Music students must attend 36 convocations as a graduation requirement.
- Music students must attend 30 Dana School of Music concerts or recitals.
- Applied lesson must be taken concurrently with large ensemble.

**Learning Outcomes**

The student learning outcomes for the major in music are as follows:

- Students will perform a public recital in their applied area.
- Students will analyze music, discriminate pitch, harmony, and rhythm and perform harmonic progressions at the piano.
- Students will demonstrate critical thinking about the various historical periods, cultural contexts, and social forces that influence musical activity.
- Students will demonstrate basic keyboard proficiency including scales, arpeggios, harmonization, repertoire, transpositions, and score reading.
- Students will research and create a document on a music-historical or music-theoretical subject.
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- Music students must attend 30 Dana School of Music concerts or recitals within the first two years of study.
- Applied lesson must be taken concurrently with large ensemble each semester.

### Year 1

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**Learning Outcomes**

The student learning outcomes for the major in music are as follows:

- Students will perform a public recital in their applied area.
- Students will analyze music, discriminate pitch, harmony, and rhythm and perform harmonic progressions at the piano.
- Students will demonstrate critical thinking about the various historical periods, cultural contexts, and social forces that influence musical activity.
- Students will demonstrate basic keyboard proficiency including scales, arpeggios, harmonization, repertoire, transpositions, and score reading.
- Students will research and create a document on a music-historical or music-theoretical subject.
Students in the Intensive Track will substitute MUTC 1532N for MUTC 1532
MUTC 2632 & MUTC 2642
Music Theory 4 and Aural Theory 4

Music History and Literature courses:
MUHL 3771 Music History and Literature 1
MUHL 3772 Music History and Literature 2
MUHL 3773 Music History and Literature 3
MUHL 3774 Music History and Literature 4

Choral and Instrumental Conducting
MUCO 3715

Keyboard Musicanship

Select one course sequence for non-keyboard or keyboard majors:
Non-keyboard Majors
MUAC 1581 Class Piano 1
MUAC 1582 Class Piano 2
MUAC 2681 Class Piano 3
MUAC 2682 Class Piano 4

OR
Keyboard Majors
MUAC 2691 Professional Piano Skills 1
MUAC 2692 Professional Piano Skills 2
MUAC 2693 Professional Piano Skills 3
MUAC 2694 Professional Piano Skills 4

Applied Instrument/Voice 1501-4801 (Primary instruments: 1501, 1502, 2601, 2602, 3701, 3702, 4801)
Large Ensemble
Chamber Ensemble
Senior Recital

Electives
BUS 3740 Nonprofit Community Service 1
BUS 4840 Nonprofit Leadership Internship
BUS 4841 Nonprofit Leadership Seminar
PHIL 2625 Introduction to Professional Ethics
PHIL 2628 Business Ethics
MKTG 3702 Business Professionalism

Semester Hours

Music students must attend 36 convocations as a graduation requirement.
Music students must attend 30 Dana School of Music concerts or recitals within the first two years of study.
Applied lesson must be taken concurrently with large ensemble each semester.
Bachelor of Arts in Performance, Instrumental Track

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<td>PHIL 2625</td>
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Semester Hours 16

Year 4

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Semester Hours 16

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<td>BUS 4841</td>
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Semester Hours 16

Total Semester Hours 126

Bachelor of Arts in Performance, Instrumental Track

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Semester Hours 16

Year 4

Fall

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<td>MUTC 2632</td>
<td>Music Theory 4</td>
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<td>&amp; MUTC 2642</td>
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<td>MUTC 2642</td>
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<td>MUTC 3750</td>
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Music History and Literature: 12 hours

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<td>Music History and Literature 1</td>
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<td>MUHL 3772</td>
<td>Music History and Literature 2</td>
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<td>MUHL 3773</td>
<td>Music History and Literature 3</td>
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Keyboard Musicianship: 4 hours

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<td>MUAC 2681</td>
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<td>or MUAC 378</td>
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<td>MUAC 2682</td>
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Conducting: 3 hours

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Semester Hours 16

Applied Major: 14 hours

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Large Ensembles: 5 hours of MUEN

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Chamber Ensembles: 2 hours of MUEN

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<thead>
<tr>
<th>COURSE</th>
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<tbody>
<tr>
<td>4050</td>
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Dana School of Music Requirements:

Convocation attendance requirement
Recital attendance requirement
Senior Recital (connected to Applied Major 4801)
Minor: 18 hours (6 hours upper division)

Minimum Total Semester Hours for the Degree: 125

Bachelor of Music in Music Education, Instrumental Track

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
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<tr>
<td>YSU 1500</td>
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<tr>
<td>or SS 1500</td>
<td>Strong Start Success Seminar</td>
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<tr>
<td>or HONR 1500</td>
<td>Intro to Honors</td>
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General Education Requirements

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<tr>
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<tbody>
<tr>
<td>ENGL 1550</td>
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<td>or ENGL 1549</td>
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<td>ENGL 1551</td>
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<td>CMST 1545</td>
<td>Communication Foundations</td>
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<tr>
<td>MATH 2623</td>
<td>Quantitative Reasoning</td>
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Knowledge Domains

Art and Humanities (6 s.h.)

Requirement satisfied by 6 hours of MUHL 3772, MUHL 3773, or MUHL 3774

Natural Sciences (2 courses, 1 with lab) (7 s.h.)

Social Science (6 s.h.)
PSYC 1560  General Psychology  3
Social Science elective  3
Social and Personal Awareness (6 s.h.)  3
SPA elective  3
MUHL 3771 Music History and Literature 1  3

Core Music Requirements

Music Theory: 19-21 hours
MUTC 1531  Music Theory 1  4-5
& MUTC 1541  and Aural Theory 1
Students who score below 80% on the Theory Placement Exam will substitute MUTC 1531N for MUTC 1531.
MUTC 1532  Music Theory 2  4-5
& MUTC 1542  and Aural Theory 2
Students in the Intensive Track will substitute MUTC 1532N for MUTC 1532.
MUTC 2631  Music Theory 3  4
& MUTC 2641  and Aural Theory 3
MUTC 2632  Music Theory 4  4
& MUTC 2642  and Aural Theory 4
MUTC 3710  Orchestration and Arranging  3

Music History and Literature: 12 hours
MUHL 3771  Music History and Literature 1  3
MUHL 3772  Music History and Literature 2  3
MUHL 3773  Music History and Literature 3  3
MUHL 3774  Music History and Literature 4  3

Keyboard Musicianship: 4 hours
MUAC 1581  Class Piano 1  1
Keyboard majors will substitute MUAC 2691.
MUAC 1582  Class Piano 2  1
Keyboard majors will substitute MUAC 2692.
MUAC 2681  Class Piano 3  1
or MUAC 3781  Jazz Class Piano 1
Keyboard majors will substitute MUAC 2693 for MUAC 2681 or may enroll in MUAC 3781.
MUAC 2682  Class Piano 4  1
or MUAC 3782  Jazz Class Piano 2
Keyboard majors will substitute MUAC 2694 for MUAC 2682 or may enroll in MUAC 3782.

Conducting
MUCO 3715  Choral and Instrumental Conducting  3

Applied Lessons
Primary Instrument Applied Lessons: 14 hours
Applied Lesson 1501  2
Applied Lesson 1502  2
Applied Lesson 2601  2
Applied Lesson 2602  2
Applied Lesson 3701  2
Applied Lesson 3702  2
Applied Lesson 4801 (with Senior Recital)**  2

V. Ensembles
Large Ensemble  5
Chamber Ensemble  2

Music Education
Methods: 5 hours
Select 5 methods courses from the following:  5
MUAC 3732 Brass Methods
MUAC 3733 Woodwind Methods
MUAC 3734 String Methods
MUAC 3735 Jazz Methods
MUAC 3755 Guitar Methods
MUAC 3759 Voice Methods
MUAC 3763 Percussion Methods

Music Education: 24 hours
MUED 2611  Computer Applications in Music Education  2
MUED 2622  Foundations of Music Education  2
MUED 4823  Music Teaching in Early Childhood (Pre K-3)  3
MUED 4824  Music Teaching in the Middle School  3
MUED 4825  Music Teaching in the High School  3
MUED 4821  Instrumental Music Education  2
MUED 4842A  Student Teaching Seminar for Music Education  2
MUED 4844  Supervised Student Teaching: Music (K-12)  10

**Prior to student teaching (MUED 4844), students are required to complete the Senior Recital.

College of Education: 6 hours
EDFN 3708  Education and Society  3
PSYC 3709  Psychology of Education  3

Total Semester Hours  126-130

• Music students must attend 36 convocations as a graduation requirement.
• Music students must attend 30 Dana School of Music concerts or recitals.
• Applied lesson must be taken concurrently with a large ensemble each semester.

1 A student may satisfy the MATH requirement by passing this course or one of the following alternate courses or its equivalent: MATH 1510, MATH 1511, MATH 1512, MATH 1552, MATH 1571, MATH 1581H, MATH 1585H, MATH 2652, MATH 2665, MATH 2670, MATH 2686H, PHIL 2619, or STAT 2601.

Different Emphases may vary slightly

Year 1

Fall  S.H.
YSU 1500  Success Seminar  1
Instrument or Voice 1501  2
MUTC 1531  Music Theory 1  4-5
& MUTC 1541  and Aural Theory 1
Students who score below 80% on the Theory Placement Exam will substitute MUTC 1531N for MUTC 1531.
MUAC 1581  Class Piano 1  1
Keyboard majors will substitute MUAC 2691.
MUEN XXX  1
MUAC 1582  Class Piano 2  1
MUED 2622  or MUED 2611  Foundations of Music Education or Computer Applications in Music Education  2
ENGL 1550  Writing 1  3
or ENGL 1549  or Writing 1 with Support  4
Semester Hours  12-14

Spring  S.H.
Instrument or Voice 1502  2
MUTC 1532  Music Theory 2  4-5
& MUTC 1542  and Aural Theory 2 (Core UD Gateway Course)
Students in the Intensive Track will substitute MUTC 1532N for MUTC 1532.
MUEN XXX  1
MUAC 1582  Class Piano 2  1
Keyboard majors will substitute MUAC 2692.
MUED 2622  or MUED 2611  Foundations of Music Education or Computer Applications in Music Education  2
ENGL 1551  Writing 2  3
### Bachelor of Music in Education, Instrumental Jazz Track

**Year 2**

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<tr>
<th>Semester Hours</th>
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**Fall**

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<tr>
<td>Instrument or Voice 2601</td>
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<tr>
<td>MUTC 2631</td>
<td>Music Theory 3</td>
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<tr>
<td>&amp; MUTC 2641</td>
<td>and Aural Theory 3</td>
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<tr>
<td>MUEN XXXX Large Ensemble</td>
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<tr>
<td>MUAC 2681</td>
<td>Class Piano 3</td>
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Keyboard majors will substitute MUAC 2693 or may enroll in MUAC 2684.

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<tr>
<td>MUED 2611</td>
<td>Computer Applications in Music Education</td>
<td>2</td>
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<tr>
<td>or MUED 2622</td>
<td>or Foundations of Music Education</td>
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<tr>
<td>MUAC 37XX Methods Course</td>
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<tr>
<td>MUAC 37XX Methods Course</td>
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<tr>
<td>MUHL 3771</td>
<td>Music History and Literature 1</td>
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<tr>
<td>CMST 1545</td>
<td>Communication Foundations (Core UD Gateway Course)</td>
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**Year 3**

<table>
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<tr>
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**Fall**

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<td>MUTC 3710</td>
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<td>MUED 4823</td>
<td>Music Teaching in Early Childhood (Pre K-3)</td>
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<td>MUED 4821</td>
<td>Instrumental Music Education</td>
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<tr>
<td>MUHL 3773</td>
<td>Music History and Literature 3</td>
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<tr>
<td>MUEN XXXX Large Ensemble</td>
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<tr>
<td>PSYC 3709</td>
<td>Psychology of Education</td>
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If students wish to student teach in the spring of 4th year, all convocation requirements must be completed by the end of 3rd year.

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<tr>
<td>Instrument or Voice 3702</td>
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<td>MUED 4824</td>
<td>Music Teaching in the Middle School</td>
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<td>MUOC 3715</td>
<td>Choral and Instrumental Conducting</td>
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<tr>
<td>MUEN XXXX Chamber Ensemble</td>
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<tr>
<td>MUHL 3774</td>
<td>Music History and Literature 4</td>
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<td>General Education Elective</td>
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<table>
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<tr>
<td>ENGL 1550</td>
<td>Writing 1</td>
<td>3-4</td>
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<td>or ENGL 1549</td>
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<tr>
<td>ENGL 1551</td>
<td>Writing 2</td>
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</tr>
<tr>
<td>CMST 1545</td>
<td>Communication Foundations</td>
<td>3</td>
</tr>
<tr>
<td>MATH 2623</td>
<td>Quantitative Reasoning</td>
<td>3</td>
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<tr>
<td>Arts and Humanities (6 hours satisfied by MUHL 3772, MUHL 3773, or MUHL 3774)</td>
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<tr>
<td>Natural Science (2 courses; one with lab) (7 s.h.)</td>
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<tr>
<td>Social Science (6 s.h.)</td>
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<tr>
<td>PSYC 1560</td>
<td>General Psychology</td>
<td>3</td>
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<tr>
<td>Social Science elective</td>
<td>3</td>
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<tr>
<td>Social and Personal Awareness (6 hours satisfied by MUHL 3771 and one SPA elective)</td>
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**Core Music Requirements**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
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</thead>
<tbody>
<tr>
<td>Music Theory: 19-21 hours</td>
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</tbody>
</table>
Students who score below 80% on the Theory Placement Exam will substitute MUTC 1531N for MUTC 1531.

Students in the Intensive Track will substitute MUTC 1532N for MUTC 1532.

Students must attend 36 convocations as a graduation requirement. Music students must attend 30 Dana School of Music concerts or recitals. Applied lesson must be taken concurrently with an ensemble each semester. Students are required to complete the Senior Recital prior to student teaching (MUED 4844).**

Students may satisfy the MATH requirement by passing this course or one of the following alternate courses or its equivalent: MATH 1510, MATH 1511, MATH 1513, MATH 1552, MATH 1571, MATH 1581H, MATH 1583H, MATH 2652, MATH 2665, MATH 2670, MATH 2686H, PHIL 2619, or STAT 2601.
### Year 2

#### Fall
- **Instrument or Voice 2601**
- **MUTC 2631** Music Theory 3
- & **MUTC 2641** and Aural Theory 3
- **MUEN 0023**
- **MUED 2611** Computer Applications in Music Education
- **MUAC 3781** Jazz Class Piano 1
- **MUAC 3735** Jazz Methods
- **MUAC 3733** Woodwind Methods
- **MUHL 3771** Music History and Literature 1
- **CMST 1545** Communication Foundations

**Semester Hours:** 18

#### Spring
- **Instrument or Voice 2602**
- **MUTC 2632** Music Theory 4
- & **MUTC 2642** and Aural Theory 4
- **MUHL 3775** Jazz History
- **MUAC 3763** Percussion Methods
- **MUAC 3782** Jazz Class Piano 2
- **Application for Upper Division must be completed by this semester.**
- **Natural Science Elective + Lab**
- **MUEN 0030** Jazz Combo
- **General Education Electives**

**Semester Hours:** 19

### Year 3

#### Fall
- **Instrument or Voice 3701**
- **MUED 4823** Music Teaching in Early Childhood (Pre K-3)
- **MUED 4821** Instrumental Music Education
- **MUTC 3712** Jazz Arranging 1
- **MUHL 3773** Music History and Literature 3
- **General Education Electives**
- **MUEN 0023**

All convocation requirements must be completed by the end of the third year for students who wish to teach in the second semester of the fourth year.

**Semester Hours:** 16

#### Spring
- **Instrument or Voice 3702**
- **MUED 4824** Music Teaching in the Middle School
- **MUHL 3774** Music History and Literature 4
- **MUOC 3715** Choral and Instrumental Conducting
- **PSYC 1560** General Psychology
- **General Education Requirements**
- **MUEN 0023**

**Semester Hours:** 17

### Year 4

#### Fall
- **Senior Recital MUST be completed by the end of this semester.**
- The following 3 courses must be scheduled in the semester prior to student teaching if student teaching is to take place in the spring. Application to student teach is due September 15.
- **Placement meeting with Music Education Coordinator must occur before September 15.**
- **MULT 4807**
- **TERG 3710**

**Semester Hours:** 16

### Bachelor of Music in Music Education, Voice Track

<table>
<thead>
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<th>COURSE</th>
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<tr>
<td><strong>First Year Requirement - Student Success</strong></td>
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<td>YSU 1500</td>
<td>Success Seminar</td>
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<td>or SS 1500</td>
<td>Strong Start Success Seminar</td>
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<tr>
<td>or HONR 1500</td>
<td>Intro to Honors</td>
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<td><strong>General Education Requirements</strong></td>
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<tr>
<td>ENGL 1550</td>
<td>Writing 1</td>
<td>3-4</td>
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<td>or ENGL 1549</td>
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<tr>
<td>ENGL 1551</td>
<td>Writing 2</td>
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<td>CMST 1545</td>
<td>Communication Foundations</td>
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<tr>
<td>MATH 2623</td>
<td>Quantitative Reasoning</td>
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<tr>
<td><strong>Arts and Humanities (6 s.h.)</strong></td>
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<tr>
<td><strong>Requirement satisfied by 6 hours of MUHL 3772-3774</strong></td>
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<tr>
<td>Natural Sciences (2 courses, 1 with lab) (6-7 s.h.)</td>
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<tr>
<td><strong>Social Science (6 s.h.)</strong></td>
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<td>PSYC 1560</td>
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<td><strong>Social Science elective</strong></td>
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<tr>
<td><strong>Social and Personal Awareness (6 s.h.)</strong></td>
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<tr>
<td><strong>MUHL 3771</strong></td>
<td>Music History and Literature 1</td>
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<td><strong>SPA elective</strong></td>
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### Core Music Requirements

**Music Theory: 19-21 hours**

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<th>COURSE</th>
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<tbody>
<tr>
<td>MUTC 1531</td>
<td>Music Theory 1</td>
<td>4-5</td>
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<tr>
<td>&amp; MUTC 1541</td>
<td>and Aural Theory 1</td>
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<td><strong>Students who score below 80% on the Theory Placement Exam will substitute MUTC 1531N for MUTC 1531.</strong></td>
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<tr>
<td>MUTC 1532</td>
<td>Music Theory 2</td>
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**Students in the Intensive Track will substitute MUTC 1532N for MUTC 1532.**

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<td>and Aural Theory 3</td>
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<td>MUTC 2632</td>
<td>Music Theory 4</td>
<td>4</td>
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<td>&amp; MUTC 2642</td>
<td>and Aural Theory 4</td>
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<td>MUTC 3710</td>
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**Music History and Literature: 12 hours**

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<td><strong>MUHL 3772</strong></td>
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<td>MUAC 1581</td>
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<td>MUAC 1582</td>
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<td>MUAC 2681</td>
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<td>MUAC 3781</td>
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**Applied Lessons**

**Primary Instrument Applied Lessons: 14 hours**

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<td>Applied Lesson 1502</td>
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<td>Applied Lesson 2601</td>
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<td>Applied Lesson 2602</td>
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<td>Applied Lesson 3701</td>
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<td>Applied Lesson 3702</td>
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<tr>
<td>Applied Lesson 4801 (with Senior Recital)**</td>
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**Ensembles**

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<tr>
<td>Large Ensembles: 5 hours</td>
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<td>Chamber Ensembles: 2 hours</td>
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**Music Education: 26 hours**

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<tbody>
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<td>Foundations of Music Education</td>
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<td>MUED 4823</td>
<td>Music Teaching in Early Childhood (Pre K-3)</td>
<td>3</td>
</tr>
<tr>
<td>MUED 4824</td>
<td>Music Teaching in the Middle School</td>
<td>3</td>
</tr>
<tr>
<td>MUED 4825</td>
<td>Music Teaching in the High School</td>
<td>3</td>
</tr>
<tr>
<td>MUED 4822</td>
<td>Teaching Choral Music</td>
<td>2</td>
</tr>
<tr>
<td>MUED 4842A</td>
<td>Student Teaching Seminar for Music Education</td>
<td>2</td>
</tr>
<tr>
<td>MUED 4844</td>
<td>Supervised Student Teaching: Music (K-12)</td>
<td>10</td>
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</tbody>
</table>

**College of Education: 15 hours**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>EDFN 1501</td>
<td>Introduction to Education</td>
<td>3</td>
</tr>
<tr>
<td>EDFN 3708</td>
<td>Education and Society</td>
<td>3</td>
</tr>
<tr>
<td>SPED 2630</td>
<td>Individuals with Exceptionalities in Society</td>
<td>3</td>
</tr>
<tr>
<td>TGER 2610</td>
<td>Reading Application in Content Areas Middle Years</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 3709</td>
<td>Psychology of Education</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Semester Hours** 138-142

- Music students must attend 36 convocations as a graduation requirement.
- Music students must attend 30 Dana School of Music concerts or recitals.
- Applied lesson must be taken concurrently with large ensemble each semester.

1 A student may satisfy the MATH requirement by passing this course or one of the following alternate courses or its equivalent: MATH 1510, MATH 1511, MATH 1513, MATH 1552, MATH 1571, MATH 1581H, MATH 1586H, MATH 2662, MATH 2665, MATH 2670, MATH 2686H, PHIL 2619, or STAT 2601.

**Year 1**

**Fall**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>YSU 1500</td>
<td>Success Seminar or Intro to Honors or Strong Start Success Seminar</td>
<td>1-2</td>
</tr>
<tr>
<td>MUTC 1531</td>
<td>Music Theory 1 &amp; MUTC 1541 and Aural Theory 1</td>
<td>4-5</td>
</tr>
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</table>

Students who score below 80% on the Theory Placement Exam will substitute MUTC 1531N for MUTC 1531.

**Year 2**

**Fall**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>Instrument or Voice 1501</td>
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<td>2</td>
</tr>
<tr>
<td>MUTC 1532</td>
<td>Music Theory 2 &amp; MUTC 1542 and Aural Theory 2</td>
<td>4-5</td>
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</table>

Students in the Intensive Track will substitute MUTC 1532N for MUTC 1532.

**Year 3**

**Fall**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instrument or Voice 2601</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>MUTC 2631</td>
<td>Music Theory 3 &amp; MUTC 2641 and Aural Theory 3</td>
<td>4</td>
</tr>
<tr>
<td>MUEN XXXX</td>
<td>Large Ensemble</td>
<td>1</td>
</tr>
<tr>
<td>MUAC 1582</td>
<td>Class Piano 1</td>
<td>1</td>
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**College of Education: 15 hours**

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<th>Course Title</th>
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<td>Introduction to Education</td>
<td>3</td>
</tr>
<tr>
<td>EDFN 3708</td>
<td>Education and Society</td>
<td>3</td>
</tr>
<tr>
<td>SPED 2630</td>
<td>Individuals with Exceptionalities in Society</td>
<td>3</td>
</tr>
<tr>
<td>TGER 2610</td>
<td>Reading Application in Content Areas Middle Years</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 3709</td>
<td>Psychology of Education</td>
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**Total Semester Hours** 15-18

**Spring**

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</tr>
<tr>
<td>MUTC 1532</td>
<td>Music Theory 2 &amp; MUTC 1542 and Aural Theory 2</td>
<td>4-5</td>
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</tbody>
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Students in the Intensive Track will substitute MUTC 1532N for MUTC 1532.

**College of Education: 15 hours**

<table>
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<th>Course Title</th>
<th>Credits</th>
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<td>EDFN 1501</td>
<td>Introduction to Education</td>
<td>3</td>
</tr>
<tr>
<td>EDFN 3708</td>
<td>Education and Society</td>
<td>3</td>
</tr>
<tr>
<td>SPED 2630</td>
<td>Individuals with Exceptionalities in Society</td>
<td>3</td>
</tr>
<tr>
<td>TGER 2610</td>
<td>Reading Application in Content Areas Middle Years</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 3709</td>
<td>Psychology of Education</td>
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**Total Semester Hours** 16-17

**Spring**

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<th>Course Code</th>
<th>Course Title</th>
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<tr>
<td>Instrument or Voice 2602</td>
<td></td>
<td>2</td>
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<tr>
<td>MUTC 2631</td>
<td>Music Theory 3 &amp; MUTC 2641 and Aural Theory 3</td>
<td>4</td>
</tr>
<tr>
<td>MUEN XXXX</td>
<td>Large Ensemble</td>
<td>1</td>
</tr>
<tr>
<td>MUAC 1582</td>
<td>Class Piano 1</td>
<td>1</td>
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**College of Education: 15 hours**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDFN 1501</td>
<td>Introduction to Education</td>
<td>3</td>
</tr>
<tr>
<td>EDFN 3708</td>
<td>Education and Society</td>
<td>3</td>
</tr>
<tr>
<td>SPED 2630</td>
<td>Individuals with Exceptionalities in Society</td>
<td>3</td>
</tr>
<tr>
<td>TGER 2610</td>
<td>Reading Application in Content Areas Middle Years</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 3709</td>
<td>Psychology of Education</td>
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</tbody>
</table>

**Total Semester Hours** 18
Bachelor of Music with an Emphasis in Music Recording Track

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
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</thead>
<tbody>
<tr>
<td>MUTC 2632</td>
<td>Music Theory 4</td>
<td>4</td>
</tr>
<tr>
<td>&amp; MUTC 2642</td>
<td>and Aural Theory 4</td>
<td></td>
</tr>
<tr>
<td>MUHL 3772</td>
<td>Music History and Literature 2</td>
<td>3</td>
</tr>
<tr>
<td>MUAC 2682</td>
<td>Class Piano 4</td>
<td>1</td>
</tr>
<tr>
<td>Keyboard majors will substitute MUAC 2694.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUTC 37XX Methods Course</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>MUTC 37XX Methods Course</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>MUEN XXXX Large Ensemble</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>General Education Elective</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

Application for Upper Division must be completed by this semester.

**Total Semester Hours 126-130**

- Music students must attend 36 convocations as a graduation requirement.
- Music students must attend 30 Dana School of Music concerts or recitals.
- Applied lesson must be taken concurrently with large ensemble each semester.

A student may satisfy the MATH requirement by passing this course or one of the following alternate courses or its equivalent: MATH 1510, MATH 1511, MATH 1512, MATH 1552, MATH 1571, MATH 1581H, MATH 1585H, MATH 2662, MATH 2665, MATH 2670, MATH 2686H, PHIL 2619, or STAT 2601.

Bachelor of Music with an Emphasis in Music Recording Track

Students may pursue a Bachelor of Music in Music Recording with an emphasis in Entrepreneurship, Video Production, and Jazz Studies.

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. General Education Requirements</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Core Competencies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 1550</td>
<td>Writing 1</td>
<td>3-4</td>
</tr>
<tr>
<td>or ENGL 1549</td>
<td>Writing 1 with Support</td>
<td></td>
</tr>
<tr>
<td>ENGL 1551</td>
<td>Writing 2</td>
<td>3</td>
</tr>
<tr>
<td>CMST 1545</td>
<td>Communication Foundations</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics Requirement</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Knowledge Domains</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arts and Humanities (6 s.h.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Requirement satisfied by 6 hours of MUHL 3772-3774</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Natural Sciences (2 courses, 1 with lab) (6-7 s.h.)</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Social Science (6 s.h.)</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Social and Personal Awareness (6 s.h.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUHL 3771</td>
<td>Music History and Literature 1</td>
<td>3</td>
</tr>
<tr>
<td>SPA elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>First-Year Experience course (or Gen Ed elective if needed)</td>
<td>3</td>
<td></td>
</tr>
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</table>

I. Music Theory

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
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</thead>
<tbody>
<tr>
<td>MUTC 1531</td>
<td>Music Theory 1</td>
<td>4</td>
</tr>
<tr>
<td>&amp; MUTC 1541</td>
<td>and Aural Theory 1</td>
<td></td>
</tr>
<tr>
<td>Students who score below 80% on the Theory Placement Exam will substitute MUTC 1531N for MUTC 1531</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUTC 1532</td>
<td>Music Theory 2</td>
<td>4</td>
</tr>
<tr>
<td>&amp; MUTC 1542</td>
<td>and Aural Theory 2</td>
<td></td>
</tr>
<tr>
<td>Students in the Intensive Track will substitute MUTC 1532N for MUTC 1532</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUTC 2631</td>
<td>Music Theory 3</td>
<td>4</td>
</tr>
<tr>
<td>&amp; MUTC 2641</td>
<td>and Aural Theory 3</td>
<td></td>
</tr>
<tr>
<td>MUTC 2632</td>
<td>Music Theory 4</td>
<td>4</td>
</tr>
<tr>
<td>&amp; MUTC 2642</td>
<td>and Aural Theory 4</td>
<td></td>
</tr>
<tr>
<td>MUTC 3750</td>
<td>Analytical Techniques</td>
<td>3</td>
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II. Music History and Literature

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
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<tbody>
<tr>
<td>MUHL 3771</td>
<td>Music History and Literature 1</td>
<td>3</td>
</tr>
<tr>
<td>or MUHL 3772</td>
<td>Music History and Literature 2</td>
<td></td>
</tr>
<tr>
<td>MUHL 3773</td>
<td>Music History and Literature 3</td>
<td>3</td>
</tr>
<tr>
<td>MUHL 3774</td>
<td>Music History and Literature 4</td>
<td>3</td>
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<tr>
<td>MUHL 3775</td>
<td>Jazz History</td>
<td>3</td>
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</table>

III. Applied Study

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
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<tbody>
<tr>
<td>Primary instrument: 1501, 1502, 2601, 2602, 3701, 3702, 4801</td>
<td>14</td>
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<tr>
<td>Senior Recital</td>
<td></td>
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</tr>
<tr>
<td>MUAC 2682</td>
<td>Class Piano 4</td>
<td>1</td>
</tr>
</tbody>
</table>

**Total Semester Hours 126-130**
### Year 1

#### Fall

- MUTC 1531 & MUTC 1541: Music Theory 1 and Aural Theory 1  
  *S.H.*: 4  
  Students who score below 80% on the Theory Placement Exam will substitute MUTC 1531N for MUTC 1531  
  MUAC 1581: Class Piano 1  
  MUEN 00XX: Instrument 1501  
  General Education Electives / First Year Experience  
  **Semester Hours**: 11

#### Spring

- MUTC 1532 & MUTC 1542: Music Theory 2 and Aural Theory 2  
  *S.H.*: 4  
  Students in the Intensive Track will substitute MUTC 1532N for MUTC 1532  
  MUAC 1582: Class Piano 2  
  MUEN 00XX: Instrument 1502  
  MUIN 1561: Music Recording Workshop  
  Natural Science + Lab  
  **Semester Hours**: 16

### Year 2

#### Fall

- MUTC 2631 & MUTC 2641: Music Theory 3 and Aural Theory 3  
  MUAC 2681: Class Piano 3  
  MUEN 00XX: Instrument 2601  
  MUHL 2616: Survey of Jazz  
  MUIN 3762: Digital Sound Production  
  General Education Elective  
  **Semester Hours**: 16

#### Spring

- MUTC 2632 & MUTC 2642: Music Theory 4 and Aural Theory 4  
  MUAC 2682: Class Piano 4  
  MUEN 00XX: Instrument 2602  
  MUHL 2618: Rock ’n’ Roll to Rock (suggested elective)  
  MUIN 3763: Digital Recording and Editing  
  **Semester Hours**: 16

### Year 3

#### Fall

- MUTC 3750: Analytical Techniques  
  MUEN 00XX: Instrument 3701  
  MUIN 3764: Advanced Microphone Techniques  
  General Education Elective  
  **Semester Hours**: 17

#### Spring

- MUHL 3772: Music History and Literature 2  
  MUEN 00XX: Instrument 3702  
  MUIN 3765: Advanced Recording Techniques  
  General Education Elective  
  **Semester Hours**: 17

### Year 4

#### Fall

- MUHL 3773: Music History and Literature 3  
  MUEN 4867: Senior Project  
  MUIN 00XX: Music Electives  
  **Semester Hours**: 15

#### Spring

- MUHL 3775: Jazz History (suggested elective)  
  MUHL 3774: Music History and Literature 4  
  MUIN 4867: Senior Project  
  Music Electives  
  **Semester Hours**: 16

### Total Semester Hours

- 127-128

### Learning Outcomes

The student learning outcomes for the major in music are as follows:

- Students will perform a public recital in their applied area.
- Students will analyze music, discriminate pitch, harmony, and rhythm and perform harmonic progressions at the piano.
- Students will demonstrate critical thinking about the various historical periods, cultural contexts, and social forces that influence musical activity.
- Students will demonstrate basic keyboard proficiency including scales, arpeggios, harmonization, repertoire, transpositions, and score reading.
- Students will record, edit, and produce music.
Bachelor of Music in Music Performance, Instrumental Track

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
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</tr>
</thead>
<tbody>
<tr>
<td>I. General Education Requirements</td>
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</tr>
<tr>
<td>Core Competencies</td>
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<td></td>
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<tr>
<td>ENGL 1550</td>
<td>Writing 1</td>
<td>3-4</td>
</tr>
<tr>
<td>or ENGL 1549</td>
<td>Writing 1 with Support</td>
<td></td>
</tr>
<tr>
<td>ENGL 1551</td>
<td>Writing 2</td>
<td>3</td>
</tr>
<tr>
<td>CMST 1545</td>
<td>Communication Foundations</td>
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<td>Mathematics Requirement</td>
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<td>3</td>
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<tr>
<td>Knowledge Domains</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arts and Humanities (6 s.h.)</td>
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<tr>
<td>Requirement satisfied by 6 hours of MUHL 3772-3774</td>
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<tr>
<td>Natural Sciences (2 courses, 1 with lab) (6-7 s.h.)</td>
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<td></td>
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<tr>
<td>Social Science (6 s.h.)</td>
<td>6</td>
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<tr>
<td>Social and Personal Awareness (6 s.h.)</td>
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<td>MUHL 3771</td>
<td>Music History and Literature 1</td>
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<td>SPA elective</td>
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<td>First-Year Experience course (or Gen Ed elective if needed)</td>
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<tr>
<td>II. Core Music Requirements</td>
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<tr>
<td>MUTC 1531 &amp; MUTC 1541</td>
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<tr>
<td>Students who score below 80% on the Theory Placement Exam will substitute MUTC 1531N for MUTC 1531</td>
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<td></td>
</tr>
<tr>
<td>MUTC 1532 &amp; MUTC 1542</td>
<td>Music Theory 2 and Aural Theory 2</td>
<td>4</td>
</tr>
<tr>
<td>Students in the Intensive Track will substitute MUTC 1532N for MUTC 1532</td>
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<td></td>
</tr>
<tr>
<td>MUTC 2631 &amp; MUTC 2641</td>
<td>Music Theory 3 and Aural Theory 3</td>
<td>4</td>
</tr>
<tr>
<td>MUAC 2681</td>
<td>or MUAC 3781</td>
<td>Class Piano 3 or Jazz Class Piano 1</td>
</tr>
<tr>
<td>MUEN 00XX</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Instrument 1502</td>
<td>2</td>
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<tr>
<td>General Education Electives / First Year Experience</td>
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<td></td>
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<tr>
<td>ENGL 1551</td>
<td>Writing 2</td>
<td>3</td>
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<tr>
<td>III. Instrumental Emphasis</td>
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<tr>
<td>Primary Instrument: 1501, 1502, 2605, 2606, 3705, 3706, 4805, 4806</td>
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<td></td>
</tr>
<tr>
<td>Junior/Senior Recitals</td>
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<td>N/C</td>
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<tr>
<td>MUAC 1581</td>
<td>Class Piano 1</td>
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</tr>
<tr>
<td>MUAC 1582</td>
<td>Class Piano 2</td>
<td>1</td>
</tr>
<tr>
<td>MUAC 2681</td>
<td>Class Piano 3</td>
<td>1</td>
</tr>
<tr>
<td>or MUAC 3781</td>
<td>Jazz Class Piano 1</td>
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</tr>
<tr>
<td>MUAC 2682</td>
<td>Class Piano 4</td>
<td>1</td>
</tr>
<tr>
<td>or MUAC 3782</td>
<td>Jazz Class Piano 2</td>
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<td>Large Ensemble (guitar majors substitute Guitar Ensemble)</td>
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<tr>
<td>Chamber Ensemble</td>
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<td></td>
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<tr>
<td>MUCO 3715</td>
<td>Choral and Instrumental Conducting</td>
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<tr>
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<td></td>
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<tr>
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<td></td>
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<tr>
<td>Total Semester Hours</td>
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<td></td>
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</tbody>
</table>

- Music students must attend 36 convocations as a graduation requirement.
- Music students must attend 30 Dana School of Music concerts or recitals within the first two years of study.
- Applied lesson must be taken concurrently with large ensemble each semester.

### Semester Hours

**Year 1**

<table>
<thead>
<tr>
<th>Fall</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUTC 1531</td>
<td>Music Theory 1</td>
</tr>
<tr>
<td>&amp; MUTC 1541</td>
<td>and Aural Theory 1</td>
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<tr>
<td>MUAC 1581</td>
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<td>MUEN 00XX</td>
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<tr>
<td>Instrument 1501</td>
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<tr>
<td>ENGL 1550</td>
<td>Writing 1</td>
</tr>
<tr>
<td>or ENGL 1549</td>
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**Spring**

| MUTC 1532 | Music Theory 2 |
| & MUTC 1542 | and Aural Theory 2 |
| Students in the Intensive Track will substitute MUTC 1532N for MUTC 1532 | |
| MUAC 1582 | Class Piano 2 |
| MUEN 00XX | 1 |
| Instrument 1502 | 2 |
| General Education Electives | 6 |
| ENGL 1551 | Writing 2 |
| Semester Hours | 17 |

**Year 2**

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<td>Music Theory 3</td>
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<td>and Aural Theory 3</td>
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<tr>
<td>MUTC 2632</td>
<td>Music Theory 4</td>
</tr>
<tr>
<td>&amp; MUTC 2642</td>
<td>and Aural Theory 4</td>
</tr>
<tr>
<td>MUTC 3750</td>
<td>Analytical Techniques</td>
</tr>
<tr>
<td>MUHL 3771</td>
<td>Music History and Literature 1</td>
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<tr>
<td>MUHL 3772</td>
<td>Music History and Literature 2</td>
</tr>
<tr>
<td>MUHL 3773</td>
<td>Music History and Literature 3</td>
</tr>
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<td>MUHL 3774</td>
<td>Music History and Literature 4</td>
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<td>Chamber Ensemble</td>
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<tr>
<td>Instrument 2605</td>
<td>4</td>
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<tr>
<td>MUHL 3771</td>
<td>Music History and Literature 1</td>
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<tr>
<td>CMST 1545</td>
<td>Communication Foundations</td>
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<td>Semester Hours</td>
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**Spring**

| MUTC 2632 | Music Theory 4 |
| & MUTC 2642 | and Aural Theory 4 |
| MUAC 2682 | Class Piano 4 |
| or MUAC 3782 | Jazz Class Piano 2 |
| MUEN 00XX | 1 |
| Instrument 2606 | 4 |
| MUHL 3772 | Music History and Literature 2 |
| MATH 2623 | Quantitative Reasoning |
| Semester Hours | 16 |

**Year 3**

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<td>MUHL 3773</td>
<td>Music History and Literature 3</td>
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<td>Instrument 3705</td>
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Learning Outcomes
The student learning outcomes for the major in music are as follows:

- Students will perform a public recital in their applied area.
- Students will analyze music, discriminate pitch, harmony, and rhythm and perform harmonic progressions at the piano.
- Students will demonstrate critical thinking about the various historical periods, cultural contexts, and social forces that influence musical activity.
- Students will demonstrate basic keyboard proficiency including scales, arpeggios, harmonization, repertoire, transpositions, and score reading.

Bachelor of Music in Performance, Jazz Track

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<td>ENGL 1551</td>
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<td>Communication Foundations</td>
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<td>Social and Personal Awareness</td>
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<tr>
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<td>MUTC 1531</td>
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<tr>
<td>&amp; MUTC 1541</td>
<td>and Aural Theory 1</td>
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Students who score below 80% on the Theory Placement Exam will substitute MUTC 1531N for MUTC 1531
MUTC 1532 | Music Theory 2 |
& MUTC 1542 | and Aural Theory 2 |
Students in the Intensive Track will substitute MUTC 1532N for MUTC 1532
MUTC 2631 | Music Theory 3 |
& MUTC 2641 | and Aural Theory 3 |
MUTC 2632 | Music Theory 4 |
& MUTC 2642 | and Aural Theory 4 |
MUTC 3750 | Analytical Techniques |
MUHL 3771 | Music History and Literature 1 |
MUHL 3772 | Music History and Literature 2 |
MUHL 3773 | Music History and Literature 3 |
MUHL 3774 | Music History and Literature 4 |
MUHL 3775 | Jazz History |
Junior/Senior Recitals | N/ C |

III. Jazz Emphasis
Applied Major 1501-4804 | 22 |
MUAC 1581 | Class Piano 1 |
MUAC 1582 | Class Piano 2 |
MUAC 3781 | Jazz Class Piano 1 |
MUAC 3782 | Jazz Class Piano 2 |
MUAC 3735 | Jazz Methods |
MUEN 0023 Jazz Ensemble | 5 |
MUEN 0030 Jazz Combo | 5 |
MUAC 3712 | Jazz Arranging 1 |
MUAC 3713 | Jazz Arranging 2 |
MUAC 2667 | Jazz Improvisation 1 |
MUAC 2668 | Jazz Improvisation 2 |
MUAC 4867 | Jazz Improvisation 3 |
MUAC 4868 | Jazz Improvisation 4 |
MUAC 3715 | Choral and Instrumental Conducting |
MUTC/MUHL Theory/History Elective | 3 |

Total Semester Hours | 126 |

Passed TPE and Audition

Year 1

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<td>and Aural Theory 1</td>
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Students who score below 80% on the Theory Placement Exam will substitute MUTC 1531N for MUTC 1531
MUTC 1532 | Music Theory 2 |
& MUTC 1542 | and Aural Theory 2 |
Students in the Intensive Track will substitute MUTC 1532N for MUTC 1532
MUTC 2631 | Music Theory 3 |
& MUTC 2641 | and Aural Theory 3 |
MUTC 2632 | Music Theory 4 |
& MUTC 2642 | and Aural Theory 4 |
MUTC 3750 | Analytical Techniques |
MUHL 3771 | Music History and Literature 1 |
MUHL 3772 | Music History and Literature 2 |
MUHL 3773 | Music History and Literature 3 |
MUHL 3774 | Music History and Literature 4 |
MUHL 3775 | Jazz History |
Junior/Senior Recitals | N/ C |

Total Semester Hours | 126 |

Passed TPE and Audition
Bachelor of Music in Performance, Organ Track

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<td>Mathematics Requirement</td>
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<td>Social Science</td>
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<tr>
<td>Social and Personal Awareness</td>
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<tr>
<td>General Education Elective / First-Year Experience</td>
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<tr>
<td>II. Core Music Requirements</td>
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<td>MU 1531</td>
<td>Music Theory 1</td>
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<tr>
<td>MU 1541</td>
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<td>Students who score below 80% on the Theory Placement Exam will substitute MU 1531N for MU 1531</td>
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<tr>
<td>III. Organ Emphasis</td>
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<tr>
<td>Applied Major 1501-4806</td>
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Learning Outcomes

- Students will perform a public recital in their applied area.
- Students will analyze music, discriminate pitch, harmony, and rhythm and perform harmonic progressions at the piano.
- Students will demonstrate critical thinking about the various historical periods, cultural contexts, and social forces that influence musical activity.
- Students will demonstrate basic keyboard proficiency including scales, arpeggios, harmonization, repertoire, transpositions, and score reading.
- Students will perform, improvise, compose, and arrange jazz music.
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<th>TITLE</th>
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<tbody>
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<td>Professional Piano Skills 2</td>
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<td>Professional Piano Skills 3</td>
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<td>MUOC 3715</td>
<td>Choral and Instrumental Conducting</td>
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<td>MUED 5858</td>
<td>Piano Pedagogy</td>
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Passed TPE and Audition

### Year 1

#### Fall

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<td>MUAC 2691</td>
<td>Professional Piano Skills 1</td>
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<tr>
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<td>ORGN 1501</td>
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#### Spring

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### Year 2

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<td>Music Theory 3 and Aural Theory 3</td>
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<td>MUAC 2693</td>
<td>Professional Piano Skills 3</td>
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<td>MUHL 3771</td>
<td>Music History and Literature 1</td>
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#### Spring

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### Year 3

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<td>MUHL 3773</td>
<td>Music History and Literature 3</td>
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<td>Natural Science + Lab</td>
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#### Spring

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<td>Music History and Literature 4</td>
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<td>MUOC 3715</td>
<td>Choral and Instrumental Conducting</td>
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<td>ORGN 4805</td>
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<td>MATH 2623</td>
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### Year 4

#### Fall

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#### Spring

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</table>

### Total Semester Hours

127

### Learning Outcomes

The student learning outcomes for the major in music are as follows:

- Students will perform a public recital in their applied area.
- Students will analyze music, discriminate pitch, harmony, and rhythm and perform harmonic progressions at the piano.
- Students will demonstrate critical thinking about the various historical periods, cultural contexts, and social forces that influence musical activity.
- Students will demonstrate basic keyboard proficiency including scales, arpeggios, harmonization, repertoire, transpositions, and score reading.

### Bachelor of Music in Performance, Piano Track

<table>
<thead>
<tr>
<th>COURSE</th>
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<tbody>
<tr>
<td>I. General Education Requirements</td>
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</table>
Bachelor of Music in Performance, Piano Track

Mathematics Requirement 3
Knowledge Domains
Arts and Humanities (6 s.h.)
  Requirement satisfied by 6 hours of MUHL 3772-3774
Natural Sciences (2 courses, 1 with lab) (6-7 s.h.) 7
Social Science (6 s.h.) 6
Social and Personal Awareness (6 s.h.)
MUHL 3771 Music History and Literature 1 3
SPA elective 3
First-Year Experience course (or Gen Ed elective if needed) 3

II. Core Music Requirements
MUTC 1531 Music Theory 1 4
& MUTC 1541 and Aural Theory 1
Students who score below 80% on the Theory Placement Exam will substitute MUTC 1531N for MUTC 1531
MUTC 1532 Music Theory 2 4
& MUTC 1542 and Aural Theory 2
Students in the Intensive Track will substitute MUTC 1532N for MUTC 1532
MUTC 2631 Music Theory 3 4
& MUTC 2641 and Aural Theory 3
MUTC 2632 Music Theory 4 4
& MUTC 2642 and Aural Theory 4
MUTC 3750 Analytical Techniques 3
MUHL 3771 Music History and Literature 1 3
MUHL 3772 Music History and Literature 2 3
MUHL 3773 Music History and Literature 3 3
MUHL 3774 Music History and Literature 4 3
Junior/Senior Recitals N/C

III. Piano Emphasis
PIANO: 1501, 1502, 2605, 2606, 3705, 3706, 4805, 4806
Applied Major 1501-4806 28
MUAC 2691 Professional Piano Skills 1 1
MUAC 2692 Professional Piano Skills 2 1
MUAC 2693 Professional Piano Skills 3 1
MUAC 2694 Professional Piano Skills 4 1
Large Ensemble 4
Piano Chamber Ensemble 4
MUCO 3715 Choral and Instrumental Conducting 3
MUED 5858 Piano Pedagogy 3
Voice Class/Applied Voice MUAC 3759 and VOIC 1500A 2
MUTC/MUHL Upper Division Theory/History Electives (must represent both areas) 9
Music Electives 8
Total Semester Hours 130-131

- Music students must attend 36 convocations as a graduation requirement.
- Music students must attend 30 Dana School of Music concerts or recitals within the first two years of study.
- Applied lesson must be taken concurrently with large ensemble each semester.

Year 1
Fall S.H.
MUTC 1531 Music Theory 1 4
& MUTC 1541 and Aural Theory 1
Students who score below 80% on the Theory Placement Exam will substitute MUTC 1531N for MUTC 1531
MUAC 1581 Class Piano 1 1
MUEN 00XX Piano 1
PIAN 1501 Piano 2
General Education Electives / First Year Experience 3
ENGL 1550 or ENGL 1549 Writing 1 or Writing 1 with Support 3-4
Semester Hours 14-15

Spring
MUTC 1532 Music Theory 2 4
& MUTC 1542 and Aural Theory 2
Students in the Intensive Track will substitute MUTC 1532N for MUTC 1532
MUAC 1582 Class Piano 2 1
MUEN 00XX Piano 1
General Education Electives 6
ENGL 1551 Writing 2 3
PIAN 1502 Piano 2
Semester Hours 17

Year 2
Fall
MUTC 2631 Music Theory 3 4
& MUTC 2641 and Aural Theory 3
MUTC 2632 Music Theory 4 4
& MUTC 2642 and Aural Theory 4
MUTC 3750 Analytical Techniques 3
MUHL 3771 Music History and Literature 1 3
MUHL 3772 Music History and Literature 2 3
MUHL 3773 Music History and Literature 3 3
MUHL 3774 Music History and Literature 4 3
Junior/Senior Recitals N/C
General Education Electives 3
PIAN 2605 Piano 4
Semester Hours 16

Spring
MUTC 2632 Music Theory 4 4
& MUTC 2642 and Aural Theory 4
MUAC 2681 Class Piano 3 1
MUEN 00XX Piano 1
MUHL 3771 Music History and Literature 1 3
CMST 1545 Communication Foundations 3
PIAN 2606 Piano 4
Semester Hours 16

Year 3
Fall
MUTC 3750 Analytical Techniques 3
MUHL 3773 Music History and Literature 3 3
Natural Science + Lab 4
MUEN 0051 Piano Chamber 1
PIAN 3705 Piano 4
Semester Hours 15

Spring
MUHL 3774 Music History and Literature 4 3
MUCO 3715 Choral and Instrumental Conducting 3
PIAN 3706 Piano 4
MUEN 0051 Piano Chamber 1
MUED 5858 Piano Pedagogy 3
MUAC 3759 Voice Class 1
VOIC 1500A Voice 1
Semester Hours 16

Year 4
Fall
Music Upper Division Electives 3
Learning Outcomes
The student learning outcomes for the major in music are as follows:

- Students will perform a public recital in their applied area.
- Students will analyze music, discriminate pitch, harmony, and rhythm and perform harmonic progressions at the piano.
- Students will demonstrate critical thinking about the various historical periods, cultural contexts, and social forces that influence musical activity.
- Students will demonstrate basic keyboard proficiency including scales, arpeggios, harmonization, repertoire, transpositions, and score reading.

Bachelor of Music in Performance, Voice Track

<table>
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<tr>
<th>COURSE</th>
<th>TITLE</th>
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<tr>
<td>I. General Education Requirements</td>
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<td>Core Competencies</td>
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<tr>
<td>ENGL 1550</td>
<td>Writing 1</td>
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<td>Writing 1 with Support</td>
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<td>ENGL 1551</td>
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<td>CMST 1545</td>
<td>Communication Foundations</td>
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<td>Mathematics Requirement</td>
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<td>Natural Sciences (2 courses, 1 with lab) (6-7 s.h.)</td>
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<td>First-Year Experience course (or Gen Ed elective if needed)</td>
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<td>MUTC 1531</td>
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<td>MUAC 1557</td>
<td>Singer’s Diction: German</td>
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<td>MUAC 1558</td>
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- Music students must attend 36 convocations as a graduation requirement.
- Music students must attend 30 Dana School of Music concerts or recitals within the first two years of study.
- Applied lesson must be taken concurrently with large ensemble each semester.

Year 1

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Fall S.H.</th>
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<td>Students who score below 80% on the Theory Placement Exam will substitute MUTC 1531N for MUTC 1531</td>
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<td>VOIC 1501</td>
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<td>ENGL 1550</td>
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<td>Semester Hours</td>
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</tbody>
</table>
Minor in Music

The student learning outcomes for the major in music are as follows:

- Students will perform a public recital in their applied area.
- Students will analyze music, discriminate pitch, harmony, and rhythm and perform harmonic progressions at the piano.
- Students will demonstrate critical thinking about the various historical periods, cultural contexts, and social forces that influence musical activity.
- Students will demonstrate basic keyboard proficiency including scales, arpeggios, harmonization, repertoire, transpositions, and score reading.
Directing or Tech/Design, we also offer a pre-professional BFA degree program where students may pursue either Theatre or a Musical Theatre track.

Welcome from the Chair
Welcome to Youngstown State University’s Department of Theatre & Dance, where you may pursue an educational program that combines rigorous professional theatre training with an excellent liberal arts education.

Our Theatre & Dance programs are dedicated to educating the next generation of theatre artists for successful careers in the entertainment industry, whether on stage or screen or behind the scenes. The department’s dedicated faculty and staff pride themselves on an approach that includes theoretical and practical training supported by personalized one-on-one mentorship. In addition to our robust curricula, students also benefit from a number of master classes and workshops given by visiting theatre and dance professionals from around the nation.

Youngstown State University’s location—midway between Cleveland, OH and Pittsburgh, PA and less than a six hour drive from both NYC and Chicago—means that students benefit from a vast array of cultural offerings as well as internships, summer stock and networking opportunities that create seamless connections with the professional world.

Join us and let our experienced faculty and staff guide your development and your confidence to succeed.

Stephanie Smith, PhD, Chair, Department of Theatre & Dance

For more information contact the Department of Theatre & Dance Office at (330) 941-3810. To schedule a personalized campus visit, contact the Cliffe College Coordinator of Admissions at 330-941-2346.

The Department of Theatre and Dance offers coursework leading to the following degrees:

- Bachelor of Arts in Theatre Studies with concentrations in Acting/ Directing, Design/Tech, or Film/Video
- Bachelor of Fine Arts in Theatre
- Bachelor of Fine Arts in Theatre/Musical Theatre track
- Minor in Musical Theatre, Puppetry, Theatre Studies, Dance, or Film

Learning Outcomes
The student learning outcomes for the major in theatre are as follows:

- Public Performances – Students demonstrate competence in the creation and presentation of public theatre events, either as performers, designers, or technicians.
- Knowledge of History and Cultural Dimensions – Students demonstrate knowledge of the history and cultural influences of and upon the institution of theatre throughout the ages.
- Informed Assessments of Quality – Students demonstrate the ability to critically evaluate works of theatre.
- Critical Thinking – Students demonstrate the ability to define a desired goal in creating a work of theatre and find solutions to achieve that goal.

In addition to the above outcomes, learning outcomes in musical theatre also include:

- Musical Knowledge – Students demonstrate an understanding of music theory, the keyboard, and the ability to read music.
- Vocal Competence – Students demonstrate an ability to sing and act a musical selection in the musical theatre style.
- Movement – Students demonstrate ability in the dance disciplines of ballet, tap, and jazz.

Professional Societies
Alpha Psi Omega
The Department of Theatre and Dance is a member of Alpha Psi Omega, the National Honorary Dramatics Fraternity. Students may become members of the local chapter by:

- achieving the prescribed cumulative grade average
- earning a prescribed number of points through participation in dramatic activities

Membership requires sophomore standing.

Professor
Katherine N. Garlick, M.F.A., Associate Professor
Matthew Mazuroski, M.F.A., Associate Professor
Lecturer
Maria Fenty Denison, D.M.A., Lecturer
Todd Dicken, M.F.A., Lecturer
Amy Wright, M.F.A., Lecturer

Majors

- Bachelor of Arts in Theatre Studies (p. 320)
- Bachelor of Fine Arts in Theatre (p. 325)
- Bachelor of Fine Arts in Theatre/Musical Theatre track (p. 323)

Minors

- Minor in Theatre (p. 327)
- Minor in Musical Theatre (p. 327)
- Minor in Dance (p. 327)
- Minor in Film Studies (p. 327)
- Minor in Puppetry (p. 327)

Dance

DNCE 1540 Modern Dance 1 1 s.h.
The theory and practice of modern dance technique at the beginning level. No previous dance experience is expected. Coursework includes body mechanics, axial and locomotor movement, and improvisation.

DNCE 1550 Conditioning and Wellness for the Performing Artist 1 s.h.
A supplement to the study of dance technique and performance, this course will help students increase their strength, flexibility, and stamina. Coursework will include various somatic systems such as Pilates and Yoga and wellness issues such as nutrition, physical and mental health, and injury prevention and treatment.

DNCE 1570 Jazz Dance 1 1 s.h.
The theory and practice of jazz dance technique at the beginning level. No previous dance experience is expected. Coursework includes body mechanics, rhythmic fundamentals, and movement exercises relating to various pop, street, and musical theatre styles.

DNCE 1571 Tap Dance 1 1 s.h.
The theory and practice of tap dance technique at the beginning level. No previous dance experience is expected. Coursework includes vocabulary and movement exercises in both Buck and Wing and Rhythm styles.

DNCE 1572 Ballet 1 1 s.h.
The theory and practice of ballet technique at the beginning level. No previous dance experience is expected. Coursework includes fundamentals of vocabulary, placement, and execution at the barre, center, and across the floor.
DNCE 1575  Hip Hop Dance  1 s.h.
An introduction to hip hop dance and its relationship to other aspects of hip hop culture, music, and media. Coursework includes street styles, breaking, and various regional forms.

DNCE 2641  Modern Dance 2  2 s.h.
The theory and practice of modern dance technique at the intermediate level. Increased technical and artistic accomplishment is expected. Course may be repeated twice for up to six hours credit.
Prereq.: DNCE 1540 or permission of the instructor.

DNCE 2667  Musical Comedy  1 s.h.
This course will supplement the dance technique track specifically in support of the study of musical theatre. Students will practice various social, world, and theatrical dance forms, learn selections from iconic choreography, experience mock dance auditions, and explore the skill of dance composition in musical theatre repertory.
Prereq.: One course in either ballet or jazz dance.

DNCE 2670  Jazz Dance 2  2 s.h.
The theory and practice of Jazz dance technique at the intermediate level. Course may be repeated twice for up to six hours credit.
Prereq.: DNCE 1570 or permission of the instructor.

DNCE 2671  Tap Dance 2  2 s.h.
The theory and practice of tap dance technique at the intermediate level. Course may be repeated twice for up to six hours credit.
Prereq.: DNCE 1571 or permission of the instructor.

DNCE 2673  Ballet 2  2 s.h.
The theory and practice of ballet technique at the intermediate level. Increased technical and artistic accomplishment is expected. Course may be repeated twice for up to six hours credit.
Prereq.: DNCE 1572 or permission of the instructor.

DNCE 2698  Survey of Dance  3 s.h.
The role of dance in culture and history, tracing the evolution of various folk, social, and concert forms. Structural and stylistic elements important for the appreciation of movement and dance.
Gen Ed: Arts and Humanities.

DNCE 3742  Dance Composition 1  2 s.h.
An introduction to the basic tools of dance composition beginning with improvisation and including body, space, time, energy, and elements of design.
Prereq.: DNCE 2641 or permission of the instructor.

DNCE 3751  Modern Dance 3  2 s.h.
The theory and practice of modern dance technique at the advanced level. Increased technical and artistic accomplishment is expected. Course may be repeated twice for up to six hours credit.
Prereq.: DNCE 2641 or permission of the instructor.

DNCE 3770  Jazz Dance 3  2 s.h.
The theory and practice of Jazz dance technique at the advanced level. Course may be repeated twice for up to six hours credit.
Prereq.: DNCE 2670 or permission of the instructor.

DNCE 3771  Tap Dance 3  2 s.h.
The theory and practice of tap dance technique at the advanced level. Increased physical dexterity and rhythmic nuance are expected. Course may be repeated twice for up to six hours credit.
Prereq.: DNCE 2671 or permission of the instructor.

DNCE 3781  Ballet 3  2 s.h.
The theory and practice of ballet technique at the advanced level. Increased technical and artistic accomplishment is expected. Course may be repeated twice for up to six hours credit.
Prereq.: DNCE 2673 or consent of the instructor.

DNCE 3791  Dance Participation  1 s.h.
Involvement with the Dance Ensemble rehearsal process and performance. Must be taken at least four times during the time a student is a dance major. Course may be repeated up to seven times. By audition only. Coreq.: With any dance technique course or permission of the instructor.

DNCE 4851  Modern Dance 4  2 s.h.
The theory and practice of modern dance technique at the pre-professional level. A high level of technical achievement, artistry, and professionalism is expected. Pre-professional level courses will include composition and pedagogy. Course may be repeated for credit.
Prereq.: DNCE 3751 or permission of the instructor.

DNCE 4881  Ballet 4  2 s.h.
The theory and practice of ballet technique at the pre-professional level. A high level of technical achievement, artistry, and professionalism is expected. Pre-professional level courses will include composition and pedagogy. Course may be repeated for credit.
Prereq.: DNCE 3781 or permission of instructor.

DNCE 4893  Independent Study in Dance  1-3 s.h.
Independent work in dance practice, pedagogy, composition, or theory under faculty guidance. Intended to allow the student to broaden their experience and expertise in an artistic or academic area of dance beyond the published coursework. May substitute for DNCE 3765 OR 4865 in the dance major, should the student propose an appropriate topic and demonstrate equivalent relevance and rigor.
Prereq.: Permission of the instructor.

DNCE 4898  Senior Project  3 s.h.
Capstone experience expected of all students in the major. Significant demonstration of practical or scholarly ability in Dance choreography and/or pedagogy.
Prereq.: Senior standing.

Theater

THTR 1512  The American Musical  3 s.h.
Learn how musicals and American history both dovetail and intersect to give a reflection of who we are as Americans. In this course, students will reclaim knowledge of 20th-century American history, centered around New York City, circa 1900 to the present. Through lenses of cultural trends, government, economy, identity, and technology, the art forms that developed into the American musical will be surveyed, while discovering how the genre itself, is affected by society.
Gen Ed: Arts and Humanities.

THTR 1559  Production Design for Stage and Screen  3 s.h.
An introduction to design for theatrical and film production, and the creative processes used by designers to make choices. Topics include script analysis, director and designer communication, and the integration of design elements into a unified production.

THTR 1560  Introduction to Theatre  3 s.h.
The theory, history, cultural role, and physical characteristics of the theatre as an institution in human society.
Gen Ed: Arts and Humanities.

THTR 1561  Stagecraft  3 s.h.
The technical elements of play production, with emphasis on stage mechanics, set construction, and scene painting.

THTR 1563  Costume Construction and Craft  3 s.h.
Introduction to stage costuming through the study and application of costume construction techniques and costume crafts, the use of appropriate equipment, and costume maintenance through various projects involving the special techniques used for stage costuming.

THTR 1590  History of Motion Pictures  3 s.h.
The history of the motion picture from its beginnings to the present, with emphasis on the milestones of film as a performing art. Viewing of significant films from various periods and countries.
Gen Ed: Arts and Humanities.
THTR 2600 Theatre Participation 1 s.h.
Expected involvement in the main stage productions of the department. Students will audition for all main stage productions, or accept a significant assignment in stage management, costume, scenery, lighting or other technical elements of production. Must be taken once each semester during the time that a student is in residence as a theatre major for a minimum of 3, or its equivalent. Course may be repeated up to three times. Prereq.: a declared major in theatre, and faculty permission.

THTR 2601 Singing Styles 1 s.h.
Students designated BFA in Musical Theatre will audition for all main stage musicals, as well as audition for participation in all other vocal/singing opportunities within the department. This course serves as the training, support, workshop, and lab for these activities. Students will train in multiple singing styles to achieve higher marketability as versatile performers. Must be taken once during the time each student is in residence as a musical theatre major but may be taken multiple times. Open to minors and non-majors by audition.

THTR 2607 Puppetry 3 s.h.
An overview of the history of puppets in world drama, combined with practical exercises in making inanimate objects come to "life" for the purpose of creating works of theater. Includes puppet construction and performance. Prereq.: Sophomore standing.

THTR 2661 Stage Management 1 s.h.
Basic principles and techniques of stage management including job functions and responsibilities, production organization, problem solving and specialized paperwork. Stage management of a production and one hour lecture per week. Stage management of a production is a requirement of the class. Grade: Traditional/PR. Prereq.: THTR 1559.

THTR 2664 Musical Theatre Studio 3 s.h.
Performance-based training, coaching, lecture, and media merge to clarify the styles and techniques of musical theatre. This course explores the many musical theatre genres, as well as the historic and stylistic differences therein. Students study, analyze, coach, and rehearse music from the MT canon. This studio course is presented in two time periods— representing one semester each: Early Musical Comedy through Classic Musical Theatre (1893-1965) and Musical Theatre: 1965-present. The time period alternates each spring. Prereq. or Coreq.: THTR 2668 and VOIC 1501T or other evidence of vocal training; and sophomore standing.

THTR 2667 Acting 2: Voice for the Actor 3 s.h.
Technical elements of voice for the stage. Physical exercises designed to improve stage speech, vocal projection, articulation and clarity. Application of principles and skills to a variety of texts from a performer’s perspective. Prereq.: THTR 2668.

THTR 2668 Acting 1: Fundamentals 3 s.h.
The fundamental theories and techniques of acting. Major emphasis on theatre acting, but consideration is given to radio and television acting. Prereq.: THTR 1559 or permission of instructor.

THTR 2690 The Art of Motion Pictures 3 s.h.
Analysis of the structure of the motion picture, the development of the script, the function of editing, the approach to acting in film production, and the problems faced by a director in film production. Criteria of artistic film making. Examples from motion pictures are screened and discussed. Prereq.: Sophomore standing. Gen Ed: Arts and Humanities.

THTR 3700 Theatre Participation 2 1 s.h.
Expected involvement in the main stage productions of the department. Students will audition for all main stage productions, or accept a significant assignment in stage management, costume, scenery, lighting or other technical elements of production. Must be taken once each semester during the time that a student is in residence as a theatre major for a minimum of 4, or it's equivalent. Course may be repeated up to four times. Prereq.: a declared major in theater and faculty permission.

THTR 3701 Professional Preparation 2 s.h.
This course covers topics vital to preparation for the business of professional theatre. Contracts, taxes, marketing, resumes, e-portfolios, interviewing, job hunting and legal considerations are among several topics to be discussed. Prereq.: THTR 1560, THTR 1561, or THTR 2668 and junior standing as theatre major.

THTR 3761 Stage Makeup 3 s.h.
Design and application of makeup for the stage including techniques for character and age makeup, making and applying facial hair, and other specialized makeup procedures. Prereq.: THTR 1559 or permission of instructor.

THTR 3762 Directing 1 3 s.h.
An intensive study of the process of directing plays. Whenever possible, students direct the equivalent of a one-act play for public presentation. Lab hours by arrangement. Prereq.: THTR 1559 and THTR 3768 or concurrently or permission of instructor.

THTR 3763 Scene Design 3 s.h.
The history of design in terms of stage scenery; an investigation of current trends, techniques, and media; practical execution of models and sketches by the student. Prereq.: THTR 1559 and THTR 1561 or consent of the instructor.

THTR 3764 History of Stage Costume 3 s.h.
A survey of stage costumes based on western styles from the ancient Egyptians to the present with emphasis on periods in which the theatre flourished. Prereq.: THTR 1559 or permission of instructor.

THTR 3765 Lighting Design 3 s.h.
A study of historical development, basic electrical theory, switch boards and lighting instruments; color theory, principles and practices in stage lighting. Lab hours to be arranged. Prereq.: THTR 1559 and THTR 1561 or consent of instructor.

THTR 3766 Stage Combat 3 s.h.
Applied skills class specializing in armed and unarmed combat for the stage. Safety factors in stage fighting, including safe use of rapier and dagger. Performance in public required. Prereq.: THTR 2668 or MUEN 0012 or KSS 1514 or permission of instructor.

THTR 3768 Script Analysis for Stage and Screen 3 s.h.
An introduction to various critical approaches to dramatic literature utilized by actors, directors, designers, dramaturgs, and other artists in theatre and film. Special attention is given to the text as a foundation for realized production and the author’s use of dramatic structure, action, subtext, and symbolism. Prereq.: THTR 1560 or permission of instructor.

THTR 3769 Costume Design 3 s.h.
Costume design for the stage through a study of script analysis, design concepts and principles, and costume rendering techniques. Prereq.: THTR 1559 or permission of instructor.

THTR 4860 Theatre History after 1700 3 s.h.
History of the physical theatre and representative dramatic texts from 1700 to the modern era. Prereq.: 9 s.h. of THTR coursework, 3 of which must be upper division.

THTR 4863 Acting 3: Styles 3 s.h.
A study of specific theories, techniques, and approaches to creating the various styles of acting. Emphasis on scene study featuring important historical styles of performance. Prereq.: THTR 1559 and THTR 2668.

THTR 4866 Summer Theatre Workshop 1-3 s.h.
Participation in the summer theatre program involving all aspects of theatrical production. Positions of significant responsibility. Prereq.: Junior standing in Theatre, or permission of instructor.
THTR 4868  Children’s Theatre  3 s.h.
A study of the process of theatre production by and for elementary school children, including theory, objectives, and methods.
Prereq.: THTR 3762 or senior standing in Elementary Education with permission of instructor.

THTR 4869  Creative Dramatics  3 s.h.
Basic elements of playmaking, improvisation, story dramatization, pantomime, dialogue, and characterization. Experience with area school children provided when possible. Intended for elementary education majors and drama certification.
Prereq.: Junior standing with 9 s.h. of theatre courses (including THTR 1559 and THTR 2668) or junior standing in Elementary Education with permission of instructor.

THTR 4870  Acting 4: Acting on Camera  3 s.h.
A exploration of the theory and technique of film and video performance, and the special demands they make upon an actor.
Prereq.: THTR 2668 and THTR 2667 and junior standing, or consent of instructor.

THTR 4891  Theatre History Before 1700  3 s.h.
History of the physical theatre and representative dramatic texts from the Classical period through the Renaissance.
Prereq.: 9 s.h. of THTR coursework, 3 of which must be upper division.

THTR 4893  Independent Study in Theatre  1-3 s.h.
Independent work in theatre production under faculty/staff guidance. Intended as a continuation of individualized creative work beyond THTR 3791 or THTR 3792. Project dependent upon approval of the evaluating faculty member and the student. May be repeated with different topics for a total of 9 s.h.
Prereq.: THTR 3791 or THTR 3792.

THTR 4898  Senior Project  3 s.h.
Capstone experience expected of all seniors in the degree programs of the department. Significant demonstration of practical or scholarly ability in one of the sub-disciplines comprising the disciplines of theatre or dance, and showing evidence of solid writing, speaking, and critical thinking skills. Grading is A,B,C,NC/PR.
Prereq.: Senior standing with the expectation of graduating by the end of the following semester.
Gen Ed: Capstone.

THTR 4899  Topics in Theatre  3 s.h.
In-depth study of selected aspects in theatre scholarship, theory or practice. May be repeated if the topic changes.
Prereq.: Junior standing or permission of instructor.

THTR 4899S  Topics Dance Kinesiology  3 s.h.
In-depth study of selected aspects in theatre scholarship, theory or practice. May be repeated if the topic changes.
Prereq.: Junior standing or permission of instructor.

THTR 4899T  Topics in Theatre Production, Design Tech for Dance  3 s.h.
In-depth study of selected aspects in theatre scholarship, theory or practice. May be repeated if the topic changes.
Prereq.: Junior standing or permission of instructor.

THTR 5864  Directing 2  3 s.h.
A study of specific theories, techniques, and various important styles in play directing.
Prereq.: THTR 1559 and THTR 3762.

Bachelor of Arts in Dance Management

This is an interdisciplinary degree combining a solid selection of practical dance coursework and a protocol of management and entrepreneurial studies offered by the Williamson College of Business Administration. It is designed to provide skills applicable to teaching dance with an understanding of basic practices related to creating or managing a small business such as a dance studio or performance company.

Important Notes

- View the Undergraduate Catalog for information including course descriptions and prerequisites, major and minor requirements, academic policies, etc.
- Check the Undergraduate Catalog for course prerequisites; classes taken out of sequence will not count toward graduation.
- A grade of “C” or better is required in all required major and minor courses. Courses taken as “CR/NC” will not count towards the major or minor.
- Courses cannot count toward both the major and minor.
- Courses taken for the major and minor may be applied toward satisfying General Education requirements but credit hours cannot be double counted.
- Course numbers of 3700 and higher are considered upper-division courses.
- You must complete coursework totaling a minimum of 124 s.h. to graduate (at least 60 s.h. must be completed at the 2600 level or higher and 48 s.h. must be at the 3700 level or higher).
- The following courses do NOT count as hours toward graduation:

Graduation Process

- One Year Before Expected Graduation
  - Request a Graduation Evaluation
  - When your evaluation is complete, make an appointment with the chairperson of your department.
- Semester You Plan To Graduate
  - Apply for graduation during the first three weeks of the semester you plan to graduate (you must have a graduation evaluation completed in advance).

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General Education Requirements

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<tr>
<td>ENGL 1551</td>
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<td>CMST 1545</td>
<td>Communication Foundations</td>
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<td>Requirement</td>
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<td>THTR 1590</td>
<td>History of Motion Pictures (required for major)</td>
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<td>Natural Sciences (2 courses, 1 with lab) (6-7 s.h.)</td>
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### Year 1

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<td>DNCE 4885</td>
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<td>MKTG 3740</td>
<td>Professional Selling</td>
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<td>THTR 1590</td>
<td>History of Motion Pictures (GER)</td>
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<td>DNCE 3791</td>
<td>Dance Participation</td>
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## Bachelor of Arts in Theatre Studies

The Bachelor of Arts in Theatre Studies combines an array of liberal arts coursework with extensive practical training in the techniques of theatre production. Students work closely with their instructors in the classroom and laboratory settings. As with any liberal arts degree, the BA is primarily designed to provide students with a broad general education, but its coursework with extensive practical training in the techniques of theatre production/performance skills as well.

### Important Notes

- View the [Undergraduate Catalog](http://cfweb.cc.ysu.edu/finaid/) online for information including course descriptions and prerequisites, major and minor requirements, academic policies, etc.
- Check the Undergraduate Catalog for course prerequisites; classes taken out of sequence will not count toward graduation.
- A grade of "C" or better is required in all required major and minor courses. Courses taken as "CR/NC" will not count toward the major or minor.
- Courses cannot count toward both the major and minor.
- Courses taken for the major and minor may be applied toward satisfying General Education requirements but credit hours cannot be double counted.
- Course numbers of 3700 and higher are considered upper-division courses.
- You must complete coursework totaling a minimum of 124 s.h. to graduate (at least 60 s.h. must be completed at the 2600 level or higher and 48 s.h. must be at the 3700 level or higher).
- The following courses do NOT count as hours toward graduation:

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<tr>
<td>MATH 1507</td>
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<td>ENGL 1509</td>
<td>Academic English for Non-native Speakers</td>
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<td>ENGL 1512</td>
<td>English Conversation for Non-native Speakers</td>
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<td>ENGL 1539</td>
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<td>ENGL 1540</td>
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<td>RSS 1510A</td>
<td>Advanced College Success Skills</td>
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### Graduation Process

- **One Year Before Expected Graduation**
  - Request a Graduation Evaluation
  - When your evaluation is complete, make an appointment with the chairperson of your department.
- **Semester You Plan To Graduate**
  - Apply for graduation during the first three weeks of the semester you plan to graduate (you must have a graduation evaluation completed in advance).

Grade of "C" or better is required for all major and minor courses. Courses cannot be taken "CR/NC".

### Learning outcomes for the degree in dance management include:

- **Basic Management Process** – Students demonstrate an understanding of basic management principles and entrepreneurship.
- **Dance Techniques** – Students demonstrate competence in a number of dance techniques and styles, including a basic understanding of world dance forms and styles.
- **Pedagogy** – Students demonstrate competence in transferring the knowledge, skills, aesthetics, and art of dance through teaching assessment.
- **Choreography and Composition** – Students demonstrate the ability to create movement combinations leading to successful compositional studies and performance choreography.

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<td>ENT 4800</td>
<td>Entrepreneurship-Business Plan Development</td>
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<td>DNCE 4892</td>
<td>Pedagogy of Dance Technique</td>
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Total Semester Hours 122-123

### Learning outcomes for the degree in dance management include:

- The residency rule states that the last 30 s.h. of your degree and at least 16 s.h. in your major and 21 s.h. in upper-division courses must be completed at YSU.
- Eligibility to continue receiving federal financial aid is affected by your "satisfactory academic progress." Carefully review details on the Office of Financial Aid and Scholarship ([http://cfweb.cc.ysu.edu/finaid/](http://cfweb.cc.ysu.edu/finaid/)) website.
- Meet with your advisor on a regular basis to ensure you are meeting requirements for graduation.
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<td>THTR 2668</td>
<td>Acting 1: Fundamentals</td>
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<td>THTR 3701</td>
<td>Professional Preparation</td>
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<tr>
<td>THTR 4893</td>
<td>Independent Study in Theatre</td>
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or THTR 4895  Arts in Education Internship: Theatre

**Electives:** Select 24 s.h. of Theatre electives or double major (at least 12 s.h. upper division).

**CHOOSE BETWEEN THE ACTING/DIRECTING TRACK or DESIGN/TECH TRACK**

**Acting/Directing Track Courses**
- THTR 2667  Acting 2: Voice for the Actor
- THTR 3761  Stage Makeup
- THTR 3762  Directing 1
- THTR 3766  Stage Combat
- THTR 4863  Acting 3: Styles
- THTR 4870  Acting 4: Acting on Camera
- THTR 4893 or THTR 4899

**Tech Design Track Courses**
- THTR 1563  Costume Construction and Craft
- THTR 2607  Puppetry
- THTR 3763  Scene Design
- THTR 3765  Lighting Design
- THTR 3764  History of Stage Costume
- THTR 3769  Costume Design
- THTR 4893 OR THRT 4899

**Minor and Electives to reach 120 hours**

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<th>Minor/Double Major</th>
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**Total Semester Hours 120-122**

**Year 1**

**Fall**
- YSU 1500 or SS 1500 or HONR 1500  Success Seminar or Strong Start Success Seminar or Intro to Honors 1-2
- ENGL 1550 or ENGL 1549  Writing 1 or Writing 1 with Support 3-4
- THTR 1512  The American Musical 3
- THTR 1559  Production Design for Stage and Screen 3
- THTR 2668  Acting 1: Fundamentals 3
- THTR 2600A Theatre Participation 1 1

**Semester Hours 14-16**

**Spring**
- CMST 1545  Communication Foundations 3
- THTR 1561  Stagecraft 3
- MATH XXXX  Approved General Education Math course 3
- THTR 2600B Theatre Participation 1 3
- ENGL 1551  Writing 2 3
- THTR 3768  Script Analysis for Stage and Screen 3

**Semester Hours 16**

**Year 2**

**Fall**
- Social and Personal Awareness 3
- FNGL 1550  Elementary Foreign Language 4
- THTR 2600C Theatre Participation 1 1
- Social Science 3
- Minor/Double Major 3

**Semester Hours 14**

**Spring**
- THTR 1590  History of Motion Pictures 3

or THTR 2690  or The Art of Motion Pictures
- THTR 3700A Theatre Participation 2 1
- FNGL 2600  Intermediate Foreign Language 4
- THTR 2661  Stage Management 1
- Natural Science + Lab 4
- Elective/Double Major 3

**Semester Hours 16**

**Year 3**

**Fall**
- THTR 3701  Professional Preparation 2
- THTR 4891  Theatre History Before 1700 3
- Minor/Double Major 3
- THTR 3708B Theatre Participation 1 1
- Minor/Double Major 3
- Elective/Double Major 3

**Semester Hours 15**

**Spring**
- THTR 4860  Theatre History after 1700 3
- THTR 4893 or THTR 4895  Independent Study in Theatre or Arts in Education Internship: Theatre 3
- Natural Science 3
- THTR 3700C Theatre Participation 2 1
- Minor/Double Major 3
- Elective/Double Major 3

**Semester Hours 16**

**Year 4**

**Fall**
- Minor/Double Major 3
- THTR 3700D Theatre Participation 2 1
- Social and Personal Awareness 3
- Upper Division Elective/Double Major 3
- Upper Division Elective/Double Major 3
- Elective/Double Major 3

**Semester Hours 16**

**Spring**
- THTR 4898  Senior Project 3
- Minor/Double Major 3
- Social Science 3
- Upper Division Elective/Double Major 3
- Upper Division Elective/Double Major 3

**Semester Hours 15**

**Total Semester Hours 122-124**

**Learning Outcomes**

1. Public Performances – Students will competently create and present public theatre events, either as a performer, designer or technician.
2. Knowledge of History and Cultural Dimensions: Students will explain the history and cultural influences of and upon the institution of theatre throughout the ages.
3. Informed Assessments of Quality: Students will critically evaluate works of theatre.
4. Critical Thinking: Students will define a desired goal in creating a work of theatre and devise a plan to achieve that goal.
Bachelor of Arts in Theatre Studies, Film/Video Track

The Bachelor of Arts in Theatre Studies, Film/Video Studies combines an array of liberal arts coursework with extensive practical training in the techniques of theatre, film, and video production. Students work closely with their instructors in the classroom as well as in laboratory settings. As with any liberal arts degree, the BA is primarily designed to provide students with a broad general education and offers specialty courses within the Theatre, Telecommunications, and English departments. Students within this degree program select one of three areas: Production, Visual Media and Design, or Critical Studies.

Important Notes

- View the Undergraduate Catalog online for information including course descriptions and prerequisites, major and minor requirements, academic policies, etc.
- Check the Undergraduate Catalog for course prerequisites; classes taken out of sequence will not count toward graduation.
- A grade of "C" or better is required in all required major and minor courses. Courses taken as "CR/NC" will not count towards the major or minor.
- Courses cannot count toward both the major and minor.
- Courses taken for the major and minor may be applied toward satisfying General Education requirements but credit hours cannot be double counted.
- Course numbers of 3700 and higher are considered upper-division courses.
- You must complete coursework totaling a minimum of 124 s.h. to graduate (at least 60 s.h. must be completed at the 2600 level or higher and 48 s.h. must be at the 3700 level or higher).
- The following courses do NOT count as hours toward graduation:

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<td>ENGL 1540</td>
<td>Introduction to College Writing</td>
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<td>RSS 1510C</td>
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- The residency rule states that the last 30 s.h. of your degree and at least 16 s.h. in your major and 21 s.h. in upper-division courses must be completed at YSU.
- Eligibility to continue receiving federal financial aid is affected by your "satisfactory academic progress." Carefully review details on the Office of Financial Aid and Scholarship (http://cfweb.cc.ysu.edu/fnaid/) website.
- Meet with your advisor on a regular basis to ensure you are meeting requirements for graduation.

Graduation Process

- One Year Before Expected Graduation
  - Request a Graduation Evaluation
  - When your evaluation is complete, make an appointment with the chairperson of your department.
- Semester You Plan To Graduate
  - Apply for graduation during the first three weeks of the semester you plan to graduate (you must have a graduation evaluation completed in advance).

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**Total Semester Hours**: 124-132

### Year 1

**Fall**

- YSU 1500 | Success Seminar or SS 1500 or HONR 1500 | 1-2 |
- ENGL 1549 | Writing 1 with Support | 3-4 |
- TCOM 1580 | Introduction to Telecommunication Studies | 3 |
- or ART 1501 | Fundamentals of 2D Design | 3 |
- or THTR 1590 | History of Motion Pictures | 3 |
- THTR 1559 | Production Design for Stage and Screen | 3 |
- THTR 2600 | Theatre Participation | 1 |
- ENGL 2665 | Introduction to Film Study | 3 |

**Semester Hours**: 14-16

**Spring**

- ENGL 1551 | Writing 2 | 3 |
- CMST 1545 | Communication Foundations | 3 |
- THTR 1590 | History of Motion Pictures | 3 |
- or THTR 2690 | The Art of Motion Pictures | 3 |
- THTR 1561 | Stagecraft | 3 |
- THTR 2600 | Theatre Participation | 1 |
- TCOM 1581 | Telecommunication Technologies | 3 |
- or ART 2691 | Introduction to Digital Media | 3 |
- or THTR 2690 | The Art of Motion Pictures | 3 |
- or THTR 1590 | History of Motion Pictures | 3 |

**Semester Hours**: 16

### Year 2

**Fall**

- CMST 2650 | Rhetoric of Film | 3 |
- THTR 2600 | Theatre Participation | 1 |
- Approved MATH Course | 3 |
- TCOM 2682 | Scriptwriting for Electronic Media | 3 |
- or ART 3792 | or ENGL 3700 | Video Art or Literary Study |
- Science with Lab | 4 |

**Semester Hours**: 16

### Year 3

**Fall**

- Foreign Language 1550 | 4 |
- THTR 3700 | Theatre Participation 2 | 1 |
- Specialization Course: TCOM 2683 or ART 3796 or Critical Studies Upper Division Elective | 3 |
- ENGL 3765 | Film Genres | 3 |
- Social and Personal Awareness Gen Ed | 3 |
- THTR 4891 | Theatre History Before 1700 | 3 |

**Semester Hours**: 17

**Spring**

- Foreign Language 2600 | 4 |
- THTR 3700 | Theatre Participation 2 | 1 |
- Theatre Design Course | 3 |
- ENGL 3748 | Screenwriting | 3 |
- THTR 4860 | Theatre History after 1700 | 3 |
- THTR 3701 | Professional Preparation | 2 |

**Semester Hours**: 16

### Year 4

**Fall**

- Foreign Language 2600 | 4 |
- THTR 3700 | Theatre Participation 2 | 1 |
- Social Science Gen Ed | 3 |
- THTR 3762 | or THTR 4870 | or Acting 4: Acting on Camera |
- Specialization Course: TCOM 3781 or ART 4891 or ENGL 3765 (second time) | 3 |
- THTR 4893 | Independent Study in Theatre | 3 |

**Semester Hours**: 13

**Spring**

- THTR 4898 | Senior Project | 3 |
- Upper Division Elective | 3 |
- Specialization Course: TCOM 4850 or ART Upper Division Elective or ENGL 4865 | 3 |
- 37XX/48XX Film Elective | 3 |
- Specialization Course: TCOM 3782 or Critical Studies Upper Division Elective | 3 |

**Semester Hours**: 12

**Total Semester Hours**: 122-124

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**Bachelor of Fine Arts in Musical Theatre Track**

The Bachelor of Fine Arts in Theatre, Musical Theatre Track is designed to provide intensive training preparing students for professional careers as actor/singer/dancers. Admission to this program is available by audition/interview only. This degree may be completed in eight semesters if students average 16
hours per semester. Retention in the program is contingent upon an annual progress review presented by each student.

**Important Notes**

- View the Undergraduate Catalog for information including course descriptions and prerequisites, major and minor requirements, academic policies, etc.
- Check the Undergraduate Catalog for course prerequisites; classes taken out of sequence will not count toward graduation.
- A grade of “C” or better is required in all required major and minor courses. Courses taken as “CR/NC” will not count toward the major or minor.
- Courses cannot count toward both the major and minor.
- Courses taken for the major and minor may be applied toward satisfying General Education requirements, but credit hours cannot be double counted.
- Course numbers of 3700 and higher are considered upper-division courses.
- You must complete coursework totaling a minimum of 120 s.h. to graduate (at least 60 s.h. must be completed at the 2600 level or higher and 39 s.h. must be at the 3700 level or higher).
- The following courses do NOT count as hours toward graduation:
  - MATH 1501
  - MATH 1507
  - ENGL 1509
  - ENGL 1512
  - ENGL 1539
  - ENGL 1540
  - RSS 1510A
  - RSS 1510B
  - RSS 1510C
  - The residency rule states that the last 30 s.h. of your degree and at least 16 s.h. in your major and 21 s.h. in upper-division courses must be completed at YSU.
  - Eligibility to continue receiving federal financial aid is affected by your "satisfactory academic progress." Carefully review details on the Office of Financial Aid and Scholarship (http://cfweb.cc.ysu.edu/finald/) website.
  - Meet with your advisor on a regular basis to ensure you are meeting requirements for graduation.

**Graduation Process**

- **One Year Before Expected Graduation**
  - Request a Graduation Evaluation
  - When your evaluation is complete, make an appointment with the chairperson of your department.
- **Semester You Plan To Graduate**
  - Apply for graduation during the first three weeks of the semester you plan to graduate (you must have a graduation evaluation completed in advance).

Grade of “C” or better is required. Courses cannot be taken "CR/NC".

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**Major Requirements**

- THTR 1559 Production Design for Stage and Screen | 3 |
- THTR 1561 Stagecraft | 3 |
- Theatre Participation 1 (THTR 2600) must be taken 3 times for a total of 3 s.h. | 3 |
- THTR 2601 Singing Styles | 1 |
- THTR 2664 Musical Theatre Studio | 3 |
- THTR 2667 Acting 2: Voice for the Actor | 3 |
- THTR 2668 Acting 1: Fundamentals | 3 |
- Theatre Participation 2 (THTR 3700) Must be taken 4 times for a total of 4 s.h. | 4 |
- THTR 3701 Professional Preparation | 2 |
- THTR 3761 Stage Makeup | 3 |
- THTR 3762 Directing 1 | 3 |
- THTR 3768 Script Analysis for Stage and Screen | 3 |
- THTR 4860 Theatre History after 1700 | 3 |
- THTR 4898 Senior Project | 3 |
- VOIC 1501T Voice Musical Theatre 1 | 2 |
- VOIC 1502T Voice Musical Theatre 2 | 2 |
- VOIC 2601T Advanced Musical Theatre 1 | 2 |
- VOIC 2602T Advanced Musical Theatre 2 | 2 |
- VOIC 3701 Voice | 2 |
- VOIC 3702 Voice | 2 |
- VOIC 4801 Voice | 2 |
- MUAC 1521 Keyboard Musicianship for Non-Music Majors 1 | 1 |
- MUAC 1522 Keyboard Musicianship for Non Music Majors 2 | 1 |
- MUTC 1541 Aural Theory 1 | 2 |
- DNCE 1570 Jazz Dance 1 | 1 |
- DNCE 1571 Tap Dance 1 | 1 |
- DNCE 1572 Ballet 1 | 1 |
- DNCE 2667 Musical Comedy | 1 |
- DNCE 2670 Jazz Dance 2 | 2 |
- DNCE 2671 Tap Dance 2 | 2 |
- DNCE 2673 Ballet 2 | 2 |
- DNCE 3770 Jazz Dance 3 | 2 |
- DNCE 3771 Tap Dance 3 | 2 |
- DNCE 3781 Ballet 3 | 2 |

Select two of the following: 6

- THTR 3764 History of Stage Costume
- THTR 3765 Lighting Design
- THTR 3766 Stage Combat
- THTR 4863 Acting 3: Styles
- THTR 4891 Theatre History Before 1700
- THTR 4899 Topics in Theatre
### Electives to meet 120 hours

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<tr>
<td></td>
<td>THTR 2600</td>
<td>Theatre Participation</td>
<td>1</td>
<td>Total Semester Hours</td>
<td>120-122</td>
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<tr>
<td>3</td>
<td>VOIC 3701</td>
<td>Voice</td>
<td>2</td>
<td>Semester Hours</td>
<td>17</td>
<td></td>
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<tr>
<td></td>
<td>DNCE 3771</td>
<td>Tap Dance 3</td>
<td>2</td>
<td>Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>THTR 4860</td>
<td>Theatre History after 1700</td>
<td>3</td>
<td>THTR 3700</td>
<td>Theatre Participation 2</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>THTR 3762</td>
<td>Directing 1</td>
<td>3</td>
<td>Upper Division THTR Elective</td>
<td>3</td>
<td></td>
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<tr>
<td></td>
<td>THTR 3700</td>
<td>Theatre Participation 2</td>
<td>1</td>
<td>Natural Science + Lab</td>
<td>4</td>
<td></td>
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<tr>
<td></td>
<td>Semester Hours</td>
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<td></td>
<td>Elective</td>
<td>1</td>
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<tr>
<td></td>
<td>Semester Hours</td>
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<td>Semester Hours</td>
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<td>Semester Hours</td>
<td>17</td>
<td></td>
<td>Elective</td>
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<tr>
<td></td>
<td>Semester Hours</td>
<td>17</td>
<td></td>
<td>Semester Hours</td>
<td>12</td>
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</tr>
</tbody>
</table>

### Learning Outcomes

1. Demonstrate the ability to act, i.e., to project one’s self believably in work and action into imaginary circumstances in roles in a wide variety of styles and formats.
2. Demonstrate a flexible, strong, and controlled voice with trained breath support; appropriate vocal range and freedom from vocal and postural tension in rehearsal and performance; the student will also demonstrate the ability to project the voice effectively in theater spaces of varying sizes.
3. Demonstrate musicianship by learning accurate rhythm, pitch, phrasing, tempi, and appropriate vocal style that is consistent with performance practice in their vocal repertoire.
4. Demonstrate physical competence in dance and movement with a focus on ballet, tap, and jazz technique.
5. Demonstrate a knowledge and understanding of basic production elements, including stage make-up.
6. Demonstrate knowledge of musical theatre repertory, the history of its development and the relationship of this history to styles of performance.
7. Demonstrate effective audition techniques.

### Bachelor of Fine Arts in Theatre

The Bachelor of Fine Arts in Theatre is designed to provide intensive training, preparing students for careers in the professional or academic theatre. Admission to this program is available by audition/interview only. Students admitted to this BFA program will combine a basic foundation of general studies with an extensive selection of performance-oriented coursework (acting, directing, design, and dance) and participation in the co-curricular activities of the theatre programmes.
Bachelor of Fine Arts in Theatre

production activities of the department. This degree may be earned in eight semesters if students average 16 hours per semester. Retention in the program is contingent upon an annual progress review presented by each student.

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FIRST YEAR REQUIREMENT - STUDENT SUCCESS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>YSU 1500 or SS 1500</td>
<td>Success Seminar</td>
<td>1-2</td>
</tr>
<tr>
<td>or HONR 1500</td>
<td>Intro to Honors</td>
<td></td>
</tr>
</tbody>
</table>

General Education Requirements

| ENGL 1550 or ENGL 1549 | Writing 1 | 3-4 |
| CMST 1545 | Communication Foundations | 3 |
| Mathematics Requirement | 3 |
| Arts and Humanities (6 s.h.) | 6 |
| Natural Sciences (2 courses, 1 with lab) (6-7 s.h.) | 7 |
| Social Science (6 s.h.) | 6 |
| Social and Personal Awareness (6 s.h.) | 6 |

Major Requirements

| THTR 1559 | Production Design for Stage and Screen | 3 |
| THTR 1561 | Stagecraft | 3 |
| THTR 2668 | Stagecraft | 3 |
| THTR 2661 | Stage Management | 1 |

Theatre Participation (THTR 2600) must be taken 3 times for a total of 3 s.h.

| THTR 3762 | Directing 1 | 3 |
| THTR 2667 | Acting 2: Voice for the Actor | 3 |
| THTR 3766 | Stage Combat | 3 |

Theatre Participation 2 (THTR 3700) must be taken 4 times for a total of 4 s.h.

Select two of the following:

| THTR 3763 | Scene Design | 3 |
| THTR 3765 | Lighting Design | 3 |
| THTR 3769 | Costume Design | 3 |
| THTR 4891 | Theatre History Before 1700 | 3 |
| THTR 3791 | Rehearsal and Performance or THTR 3792 Projects in Production (taken 2 times) | 6 |
| THTR 4860 | Theatre History after 1700 | 3 |
| THTR 3764 | History of Stage Costume | 3 |
| THTR 3768 | Script Analysis for Stage and Screen | 3 |
| THTR 4898 | Senior Project | 3 |

Select four of the following:

| THTR 1563 | Costume Construction and Craft | 3 |
| THTR 4863 | Acting 3: Styles | 3 |
| THTR 4870 | Acting 4: Acting on Camera | 3 |
| THTR 4899 | Topics in Theatre | 3 |
| THTR 5864 | Directing 2 | 3 |

Select 3 s.h. in movement from the following:

| DNCE 1570 | Jazz Dance 1 | 3 |
| DNCE 1572 | Ballet 1 | 3 |
| DNCE 1540 | Modern Dance 1 | 3 |
| DNCE 1571 | Tap Dance 1 | 3 |
| DNCE 1541 | Modern Dance 2 | 3 |
| KSS 1514 | Fencing 1 | 3 |
| KSS 1558 | Physical Fitness for Life | 3 |

KSS 1557 | Weight Training | 3 |

Electives

Select 12 s.h. of theatre or dance electives emphasizing either performance or design/technology.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Semester Hours</strong></td>
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<td>121-123</td>
</tr>
</tbody>
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Course | Title | S.H. |
<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>THTR 3768</td>
<td>Script Analysis for Stage and Screen</td>
<td>3</td>
</tr>
<tr>
<td>THTR 2668</td>
<td>Acting 1: Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>THTR 2600</td>
<td>Theatre Participation</td>
<td>1</td>
</tr>
<tr>
<td>ENGL 1550</td>
<td>Writing 1</td>
<td>3</td>
</tr>
<tr>
<td>YSU 1500</td>
<td>Success Seminar</td>
<td>1</td>
</tr>
<tr>
<td>DNCE/KSS Elective</td>
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<td>1</td>
</tr>
</tbody>
</table>

Semester Hours 12

**Spring**

| THTR 1561 | Stagecraft | 3 |
| THTR 2600 | Theatre Participation | 1 |
| THTR 2667 | Acting 2: Voice for the Actor | 3 |
| ENGL 1551 | Writing 2 | 3 |
| CMST 1545 | Communication Foundations | 3 |
| ART 1540 | Masterpieces of World Art | 3 |

Semester Hours 16

**Year 2**

**Fall**

| THTR 2600 | Theatre Participation | 1 |
| THTR 3762 | Directing 1 | 3 |
| THTR 4891 | Theatre History Before 1700 | 3 |
| or THTR 4860 | Theatre History after 1700 | 3 |

| GEN ED Science with Lab | | 4 |
| MATH 2623 | Quantitative Reasoning | 3 |
| DNCE/KSS Elective | | 2 |

Semester Hours 16

**Spring**

| THTR 3700 | Theatre Participation | 2 |
| Arts and Humanities Elective | | 3 |
| THTR 3763 | Scene Design | 3 |
| or THTR 3765 | Lighting Design | 3 |
| or THTR 3769 | Costume Design | 3 |

| THTR 3766 | Stage Combat | 3 |
| or THTR 3764 | History of Stage Costume | 3 |
| THTR 2661 | Stage Management | 1 |
| THTR 3791 | | 3 |

Semester Hours 14

**Year 3**

**Fall**

| THTR 3700 | Theatre Participation | 2 |
| THTR 4891 | Theatre History Before 1700 | 3 |
| or THTR 4860 | Theatre History after 1700 | 3 |
| THTR 1563 | Costume Construction and Craft | 3 |
| or THTR 4870 | Acting 4: Acting on Camera | 3 |
| THTR 3791 | or THTR 3792 | | 3 |

| SPA Elective | | 3 |
| Social Science Elective | | 3 |

Semester Hours 16
Minor in Dance

To complete a minor in dance, a student must complete a minimum of 23 hours of coursework as described below:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Courses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>One-third of the dance minor (7 semester hours) must be 3000 level or above.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DNCE 1540: Modern Dance 1 ¹</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>DNCE 1541: Modern Dance 2</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>DNCE 1542</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>DNCE 1550: Conditioning and Wellness for the Performing Artist</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>DNCE 1570: Jazz Dance 1 ¹</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>DNCE 1571: Tap Dance 1</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>DNCE 1572: Ballet 1 ¹</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>DNCE 3791 taken 3 times</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>DNCE 1573: Ballet 2</td>
<td></td>
<td>2</td>
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<tr>
<td>DNCE 2698: Survey of Dance</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>DNCE 4892: Pedagogy of Dance Technique</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>or DNCE 3767: Choreography for Musical Theatre</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Select a minimum of 3 or 4 additional s.h. from the following, depending on whether one takes DNCE 4892 or DNCE 3767:</td>
<td></td>
<td></td>
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<tr>
<td>DNCE 2606: Creative Dance for Children</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>DNCE 2680: Tap Dance 3</td>
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<td></td>
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<tr>
<td>DNCE 3751: Modern Dance 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DNCE 3770: Jazz Dance 3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total Semester Hours 120

¹ All dance minors are required to demonstrate proficiency at level 2 in modern, tap and jazz, and ballet technique. Level-one technique classes may be waived for students with more advanced technical proficiency.
or is a student returning to the College after a suspension, the student must major student or requires extensive remedial/developmental course work, Incoming freshmen entering the College as an undetermined major or pre-Unique Requirements of the College

Accreditation

• The emergency medical services (EMS) program is accredited by the Commission on Accreditation of Allied Health Education Programs. The EMS program is also accredited by the Ohio Department of Public Safety - Division of EMS (ODPS).
• The dental hygiene program is accredited by the American Dental Association Commission on Dental Accreditation (ADAC).
• The medical laboratory technology program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS).
• The Bachelor of Science in respiratory care program is accredited by the Commission on Accreditation for Respiratory Care (COARC).
• The Dietetics Future Model (MPH-RDN) program and the didactic program in dietetics are accredited by the Accreditation Council for Education in Nutrition and Dietetics (ACEND).
• The Bachelor of Science in Applied Science in Exercise Science is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAEHP).
• The Masters of Athletic Training program is accredited by the Commission on Accreditation of Athletic Training Education (CAATE).
• The Bachelor of Science in Nursing program is accredited by the Commission on Collegiate Nursing Education (CNNE) and the Accreditation Commission for Education in Nursing (ACEN). The program is approved by the Ohio Board of Nursing (OBN).
• The physical therapy program is accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE).
• The Long Term Care Administration is accredited by the National Association of Long-Term Care Administrator Boards (NAB).
• The social work program is accredited by the Council on Social Work Education (CSWE).

Unique Requirements of the College

Incoming freshmen entering the College as an undetermined major or pre-major student or requires extensive remedial/developmental course work, or is a student returning to the College after a suspension, the student must complete YSU 1500, Success Seminar, within the student’s first 30 semester hours of coursework.

Students need to be aware that many of the programs in the College require a criminal background check. Some require drug testing and a physical fitness examination. In a few cases, there may be a requirement for a psychological evaluation. In addition to programs requiring some or all of the checks/evaluations listed above, some of the agencies where students complete clinical training, internships, or other related activities may also require these checks/evaluations. If you are concerned that you may not be able to complete a program or one of its requirements due to any of these checks/evaluations, please speak with an academic advisor or the chairperson of the department.

Organization/Majors

The Bitonte College of Health and Human Services consists of six departments:

• Criminal Justice and Consumer Sciences
• Graduate Studies in Health and Rehabilitation Sciences
• Health Professions
• Human Services
• Military Science
• Nursing

Graduate programs are offered by the Departments of Criminal Justice and Consumer Sciences, Graduate Studies in Health and Rehabilitation Sciences, Nursing, and Human Services. The Northeastern Ohio Universities Master of Public Health program operates through a partnership of YSU, The University of Akron, Cleveland State University, Kent State University, and Northeast Ohio Medical University (NEOMED).

The six departments are listed below with their associate, baccalaureate, master’s and doctoral offerings. Students whose needs are not completely met by existing conventional programs may wish to investigate and apply for the Individualized Curriculum Program (see the Academic Policies and Procedures section).

Department of Criminal Justice and Consumer Sciences

• Basic Peace Officer Training Academy (Certificate)
• Criminal Justice (AAS, BSAS, MS) (BSAS and MS - both traditional and online degree completion)
• Fashion (Minor)
• Homeland Security (Certificate - both undergraduate and graduate)
• Hospitality Management Technology (AAS, BSAS)
• Merchandising: Fashion and Interiors (BSAS)

Department of Health Professions

• Allied Health (BSAS)1
• Applied Gerontology (Undergraduate Certificate)
• Dental Hygiene (BSDH)
• Didactic Program in Dietetics (BSAS)
• Dietetics Future Model (MPH-RDN)2
• Emergency Medical Services (AAS)
• Exercise Science (BSAS)
• Exercise Science - Graduate Degree Preparation Track (BSAS)
• Gerontology (BA, MA)
• Wellness (minor only)
• Health Information Systems (Undergraduate Certificate)
• Healthcare Management (Graduate Certificate)
• Long Term Care Administration (BSAS)
• Long Term Care Administration, Completion Track (BSAS)
• Medical Laboratory Technology (AAS)
• Medical Laboratory Science (BSAS)
• Paramedic (Certificate)
• Polysomnography (Certificate)
• Public Health (BSAS)
• Public Health (BSAS)
• Public Health, Environmental Health and Safety (BSAS)
• Respiratory Care (BSRC, MRC)
• Respiratory Care, Completion Track (BSAS)

Department of Human Services
• Social Work (BSW, MSW)
• Center for Human Services Development

Department of Graduate Studies in Health and Rehabilitation Sciences
• Athletic Training (MAT)
• Health and Human Services
• Health Sciences (Ph.D.)
• Physical Therapy (DPT)
• Public Health (MPH)

Department of Military Science
• Military Science (minor only)
• Army ROTC program

Aerospace Studies Program
Air Force ROTC Program

ROTC students are allowed certain modifications of the requirements, as explained in the Military Science section. ROTC programs are offered in agreement with Kent State University.

Department of Nursing
Bachelor of Science in Nursing Programs (BSN): Entry-level (BSN)
• Online RN-BSN Completion Program for licensed RN’s only (BSN)
Master of Science in Nursing Programs (MSN): Adult-Gerontology Acute Care Nurse Practitioner (AG-ACNP)
• Family Nurse Practitioner (FNP)
• Nurse Education
Doctor of Nurse Practice (DNP): Nurse Anesthesia (in collaboration with St. Elizabeth Health Center School for Nurse Anesthetists, Inc.)

Certificates:
• School Nursing (Post Baccalaureate, Licensure)
• Nurse Education (Post Master’s)
• Adult-Gerontology Acute Care Nurse Practitioner (Post Master’s)
• Family Nurse Practitioner (Post Master’s)

It is the student’s responsibility to satisfy all of the graduation requirements for the degree sought. These consist of:
• The pre-college or preparatory courses for each degree as covered in the Academic Policies and Procedures section.
• The courses and other requirements to be completed in the University as explained in the Academic Policies and Procedures section.
• The specific curriculum requirements of a given program.

Course descriptions can be found in a separate section in the Undergraduate Catalog.

1 This degree is made available at Cuyahoga Community College and Lorain County Community College in addition to the YSU campus offerings.
2 Restricted admission; see department for further information.
3 For the Institutional Report on the Quality of Teacher Preparation, Title II, Higher Education Act, please see Appendix C of the Undergraduate Catalog.
4 ROTC students are allowed certain modifications of the requirements, as explained in the Military Science section. ROTC programs are offered in agreement with Kent State University.

Department of Criminal Justice and Consumer Sciences
(330) 941-3279

Welcome
The Department of Criminal Justice and Consumer Sciences offers the following degrees, minors, and certificates:
• Basic Peace Office Training Academy (Certificate, one semester)
• Criminal Justice (MS, BSAS, AAS, and several minors) [Note: the BSAS and MS are offered in both traditional and online degree completion.]
• Fashion (minor)
• Homeland Security (Certificate, both undergraduate and certificate)
• Hospitality Management (AAS, BSAS)
• Merchandising: Fashion and Interiors (BSAS)

Criminal Justice Program
The four-year degree is built upon a core-track concept with emphasis (track) areas in law enforcement, corrections, legal processes, and loss prevention/assets protection.

The department also offers eight (8) minors in several emphasis areas.

In each undergraduate area and certificate program, a grade of “C” or better must be received in each required Criminal Justice course.

A graduate program is also available via two methods—traditional face-to-face as well as 100% online both leading to the Master of Science degree in Criminal Justice. Refer to the Graduate Catalog for details.

Admission Policy
Students wishing to transfer into the Department of Criminal Justice and Consumer Sciences must have a cumulative GPA of at least 2.0. Note: individuals with a felony, drug, and/or domestic violence conviction will experience difficulty gaining employment in the criminal justice and forensic sciences or forensic science field. Students with misdemeanor convictions should seek advice from an advisor in the Criminal Justice and Consumer Sciences program. Students with juvenile sex offenses convictions should also seek advice.

Retention Policy
The Department of Criminal Justice and Consumer Sciences expects its majors and students enrolled in its courses to engage in legal, ethical,
professional, and civil behavior which respects the rights of all persons. Disruptive and inappropriate behavior (as defined in department, college, or University policy) may lead to removal from, or non-acceptance into, the department as a major or as an enrolled student in one of its courses. YSU requires a 2.0 overall GPA in order to graduate.

For more information, visit the Department of Criminal Justice and Consumer Sciences.

**Police Academy and Internships**

YSU’s Criminal Justice and Consumer Sciences department now offers a full-service police academy, Basic Peace Officer Training Academy. Admission to the academy is open to all qualified applicants who meet admission standards of YSU and the Ohio Peace Officer Training Commission. All instructors in the Academy are certified by the Ohio Peace Officer Training Commission and meet all of the requirements to teach in the Basic Police Academy. YSU students who successfully complete the Academy will receive 16 semester hours of credit and a letter from the Ohio Peace Officers Training Commission that will qualify them for certification upon being commissioned. The new curriculum consists of a minimum 558 hours of training. Application packets can be picked up at the Academy Office, Cushwa Hall Room 2361.

YSU’s Criminal Justice and Consumer Sciences has an internship experience that provides students with an opportunity to integrate academic studies with the daily operation of a Criminal Justice agency. Internships also foster the development of networking relationships with practitioners who can assist in procuring future employment. Certain criminal convictions may prohibit students from being eligible for an internship experience. Student interns register for 3 to 12 semester credit hours. Each credit hour requires approximately 45 on-site hours. This program is for seniors. Students can enroll in the Police Academy or an internship, but not both.

**Chair**

John M. Hazy, Ph.D., Professor, Acting Chair

**Professor**

Christopher M. Bellas, Ph.D., Associate Professor

Gordon G. Frisora, Ph.D., Associate Professor

Priscilla N. Gitimu, Ph.D., Professor

Tammy A. King, Ph.D., Professor

Ju Yup Lee, Ph.D., Assistant Professor

Monica Merrill, Ph.D., Assistant Professor

Christian C. Onwudiwe, Ph.D., Assistant Professor

Richard Lee Rogers, Ph.D., Associate Professor

Tacibahät Turel, Ph.D., Professor

Patricia Bergum Wagner, J.D., Associate Professor

**Lecturer**

Mark Zetts, M.B.A., Senior Lecturer

**Majors**

- AAS in Criminal Justice, Law Enforcement Track (p. 337)
- AAS in Criminal Justice, Corrections Track (p. 335)
- AAS in Criminal Justice, Loss Prevention/Assets Protection Track (p. 336)
- BSAS in Criminal Justice, Law Enforcement Track (p. 340)
- BSAS in Criminal Justice, Corrections Track (p. 339)

- BSAS in Criminal Justice, Loss Prevention/Assets Protection Track (p. 343)
- BSAS in Criminal Justice, Legal Process Track (p. 342)
- BSAS in Criminal Justice, Generalist Track (p. 338)
- BSAS in Hospitality Management (p. 352)
- AAS in Hospitality Management (p. 348)
- BSAS in Merchandising: Fashion and Interiors (p. 346)

**Minors**

- Minor in Criminal Justice - Corrections (p. 345)
- Minor in Criminal Behavior (p. 345)
- Minor in Criminal Justice Ethics (p. 346)
- Minor in Criminal Justice System (p. 346)
- Minor in Criminal/Legal Processes (p. 346)
- Minor in Juvenile Justice System (p. 346)
- Minor in Law Enforcement (p. 346)
- Minor in Loss Prevention and Assets Protection (p. 346)

**Certificates**

- Certificate in Basic Peace Officer Training (p. 345)
- Certificate in Homeland Security (undergraduate) (p. 345)
- Certificate in Homeland Security (graduate) (http://catalog.ysu.edu/graduate/graduate-programs/certificate-homeland-security/)

**Criminal Justice and Forensic Science**

**Criminal Justice**

CRJS 1500  Introduction to Criminal Justice  3 s.h.
Overview of the American criminal justice process with emphasis on its constituent foundations, its constitutional limits, and the rights of the individual from arrest through sentencing and release.

CRJS 2601  Policing  3 s.h.
The evolution, structure, and function of modern police organizations; the role of police in a democratic society; the impact of social, political, and economic influences; contemporary practices and controversies.

**Prereq.:** CRJS 1500.

CRJS 2602  Criminal Courts  3 s.h.
Structure and function of criminal courts in American society, perceptions of national commissions; organization, administration, and caseload relationships with appropriate social agencies.

**Prereq.:** CRJS 1500 or permission of instructor.

CRJS 2603  Corrections  3 s.h.
Development and description of the American correctional systems’ history and philosophy; the constitutional foundations of its control, and the rights of those within it. Overview of treatment approaches.

**Prereq.:** CRJS 1500.

CRJS 3702  Correctional Strategies  4 s.h.
Contemporary theory, practice, and research findings in the administration of juvenile and adult corrections. Community-based programs, including probation/parole/post-release control; institutional resources examined within the perspectives of prevention, control, and rehabilitation of the criminal offender. Must be a Criminal Justice major or have permission of chairperson.

**Prereq.:** CRJS 2603.

**Concurrent with:** CRJS 3702L.
CRJS 3702L Correctional Strategies Laboratory 2 s.h.
Contact, observation, and on-site examination and comparison of community programs and institutional facilities. On-site 6 hours per week for 7 weeks (students are divided into two groups).
Prereq.: CRJS 2603; Must be a Criminal Justice major or have permission of chairperson.
Coreq.: CRJS 3702.

CRJS 3710 Social Statistics 3 s.h.
Measurement and interpretation of social data by use of descriptive techniques.
Prereq.: CRJS 1500.
Cross-listed: SOC 3701.

CRJS 3712 Criminal Justice Research 3 s.h.
Analysis of the major components of social research, including research design, sampling, measurement, data collection, analysis, and interpretation of findings.
Prereq.: CRJS 3710 or STAT 2601 or equivalent.

CRJS 3715 Criminal Justice Management Concepts 3 s.h.
Modern criminal justice management theory; organizational behavior, organizational development, personnel management, executive decision making, supervision problems. Must be a Criminal Justice major or have permission of chairperson.
Prereq.: CRJS 2601 or CRJS 2602 or CRJS 2603.

CRJS 3718 Family Law 3 s.h.
Fundamental elements of family law, including premarital contracts, traditional and nontraditional marriages and families, procreation rights, legitimacy and paternity, adoption, divorce and separation, property division and support, custody and termination of parental rights, juvenile law, intra-family tort liability and domestic violence.
Prereq.: SOC 1500.
Cross-listed: CHFM 3718.

CRJS 3719 Criminal Law 3 s.h.
Development, theories, and purposes of criminal law; elements of a crime, parties to a crime.
Prereq.: CRJS 2602.

CRJS 3720 Legal Research 3 s.h.
In-depth study and legal research of case law, statutes, rules and regulations at the federal and state levels. Emphasis on how to find and use primary and secondary authority, how to conduct legal research, in-depth legal writing in areas such as torts, contracts, real estate, and criminal law.
Prereq.: CRJS 2602 or permission.

CRJS 3721 Evidence 3 s.h.
Admissibility of evidence, the hearsay rule and its exceptions, opinion evidence, circumstantial evidence, documentary evidence, presumptions, corpus delicti, and evidentiary privileges. Must be a Criminal Justice or Forensic Science major.
Prereq.: CRJS 2602.

CRJS 3735 Crime and Delinquency 3 s.h.
Study of the social context of crime in society, including a review of historical theories offered in explanation of criminal behavior. Review of social and psychological factors underlying delinquency, touching on treatment and preventive measures.
Prereq.: PSYC 1560 or SOC 1500 or CRJS 3736.

CRJS 3736 Criminal Victimization 3 s.h.
Dynamics of the victim-offender relationships within the Criminal Justice System. Review of advocacy programs including information on victim compensation/assistance programs. Examination of society’s attitudes towards victims. Review of current laws advocacy for compensation of crime victims.
Prereq.: PSYC 1560 or SOC 1500 or CRJS 1500.

CRJS 3740 Criminal Justice Information Systems 3 s.h.
Information theory and practice applied to criminal justice agencies; automated systems in policing, courts, and corrections at the federal, state, and local levels; problems and constitutional constraints. Microcomputer and Internet assignments.
Prereq.: CRJS 1500.

CRJS 3751 Prevention Strategies 3 s.h.
Concepts and strategies of crime prevention, the protection of assets in the public and private sectors. Must be CJFS 5 major, or have permission of chairperson.
Prereq.: CRJS 2601.

CRJS 3752 Race, Ethnicity and Crime in America 3 s.h.
A critical analysis of current research and theories of racial and ethnic discrimination within the American criminal justice system. The discussion will center on issues relating to: patterns of criminal behavior and victimization, police practices, court processing and sentencing, the death penalty, and correctional programs.
Prereq.: CRJS 1500, SOC 1500, or PSYC 1560.

CRJS 3765 Human Relations 3 s.h.
Methods of coping with conflicts arising from law violation intervention; programs for improving interpersonal relations between police and the community.
Prereq.: SOC 1500 and PSYC 1560 plus 9 s.h. in CRJS.

CRJS 3777 Ohio Police Officer Basic Training 16 s.h.
The Ohio Attorney General’s Office, Peace Officer Training Academy’s requirements for peace/police officers are taught in the academy. The training academy at YSU consists of approximately 585 classroom hours (5 days a week, 8 hours a day for 15 weeks, plus a minimum of three weekends). Upon completion, students receive eligibility from the Ohio Peace Officer Training Commission for certification if they successfully pass the physical, skills, and written exams.
Prereq.: Senior standing and permission from the Academy Coordinator.

CRJS 3799 Directed Individual Study 1-5 s.h.
Individual study or field research of a special topic related to the criminal justice field. Application must be made to the department prior to registration. May be repeated once for a maximum of 6 s.h.
Prereq.: Senior standing and 15 s.h. of CRJS and approval of instructor.

CRJS 4800 Senior Seminar 3 s.h.
Overview of the criminal justice system in the United States. Review of constitutional issues, discussion of contemporary issues. Serves as the criminal justice senior capstone course. Portfolios and resumes prepared, assessment exam. Must be a Criminal Justice major or have permission of chairperson.
Prereq.: Senior standing or permission of chairperson.

CRJS 4803 Correctional Case Management and Treatment 3 s.h.
Theory and techniques of counseling and interviewing the correctional client including case management. Simulated field and clinical situations to provide experience in interviewing and report writing. Portfolios are resumes prepared, assessment exam. Must be a Criminal Justice major or have permission of chairperson.
Prereq.: CRJS 3702 or CRJS 2603.

CRJS 4807 Criminal Justice Internship 3-12 s.h.
Field experiences in an appropriate criminal justice agency under the direction of qualified and experienced professionals. Grading is CR/NC. May be repeated once for a maximum of 12 s.h. 3-12 s.h.
Prereq.: Senior standing in CRJS and specific emphasis area courses per department guidelines.

CRJS 4848 Loss Prevention and Assets Protection Administration 3 s.h.
Security standards, policy, and regulations at the state and federal levels as they impact on the security operations. Administrative decisions regarding security program. Plant protection, safety and security; credit and insurance investigative procedures. Portfolios and resumes prepared, assessment exam.
Prereq.: CRJS 3751 and senior standing in criminal justice or permission of chairperson.
CRJS 4850  Special Topics in Criminal Justice  3 s.h.
Contemporary issues in criminal justice. Topics are announced prior to enrollment.
Prereq.: Senior standing or permission of instructor.

CRJS 4850D  Special Topics in Criminal Justice Drugs and Crime  3 s.h.
Contemporary issues in criminal justice. Topics are announced prior to enrollment.
Prereq.: Senior standing or permission of instructor.

CRJS 4850E  Special Topics in Criminal Justice: Terrorism and Countersurveillance  3 s.h.
Contemporary issues in criminal justice. Topics are announced prior to enrollment.
Prereq.: Senior standing or permission of instructor.

CRJS 4850H  Special Topics in Criminal Justice Critical Incidents Management in Homeland Security  3 s.h.
Contemporary issues in criminal justice. Topics are announced prior to enrollment.
Prereq.: Senior standing or permission of instructor.

CRJS 4851  Women and Justice  3 s.h.
Examines the historical development and current women's issues as they related to the justice system. Women's roles in the legal system, prisons (as staff and offenders), victims and perpetrators of violence, policing society and organized crime. Female juvenile delinquency and controversial topics such as abortion and capital punishment.
Prereq.: Senior standing or permission of the chair.

CRJS 4870  Law Enforcement Administration  3 s.h.
Detailed examination of the administration of line and staff services of law enforcement agencies and the role of technology in administration. Portfolios and resumes prepared, assessment exam. Must be a Criminal Justice major or have permission of chairperson.
Prereq.: CRJS 3715 and senior standing.

CRJS 4890  Judicial Administration  3 s.h.
Court management examined in light of structure, judicial responsibility, and inherent power of courts. Case flow, case management, automation, and judicial staffing. Portfolios and resumes prepared, assessment exam.
Prereq.: CRJS 3715 and CRJS 3719 and senior standing in criminal justice or permission of chairperson.

CRJS 5802  Corrections Law and Liability  3 s.h.
Prereq.: CRJS 3702 or CRJS 3719.

CRJS 5820  Advanced Legal Research  3 s.h.
Advanced techniques in conducting legal research using standard reference tools as well as automated on-line services and the Internet. Analysis of findings of legal issues related to criminal justice, report and memoranda writing utilizing the Harvard University System of Citations, legal forms and terminology.
Prereq.: CRJS 3720 or approval of instructor.

CRJS 5825  Criminal Procedures and Constitutional Issues  3 s.h.
Constitutional foundations of the American criminal justice process with special emphasis on recent Supreme Court decisions. Legal and practical applications of the laws of arrest, criminal procedure, search and seizure, court structures, and federal civil rights.
Prereq.: CRJS 3719 and must be a criminal justice major or have permission of chairperson.

CRJS 5831  Violence in America  3 s.h.
Analysis of violence in America including official and unofficial statistics, types and levels of violence, research findings, and profiles of offenders. Case analysis of domestic violence, juvenile violence, gangs, and other forms of violence.
Prereq.: CRJS 3735.

CRJS 5840  Critical Incidents and Homeland Security  3 s.h.
This course provides an overview of emergency planning at all stages from the initial development of an emergency plan to the management of crisis situations to the evaluation of the response. The course culminates in the creation of an emergency preparedness plan for jurisdiction or agency of the student's choosing, and the student is encouraged to select a situation consistent with present work or long-term career plans.
Prereq.: CJFS 1500, PHLT 1531, OR graduate student status.

CRJS 5841  Terrorism and Countersurveillance  3 s.h.
The course provides an introduction to terrorism and counter-terrorism techniques. Generally, the course material is divided into two parts. First, the course offers a description of terrorist and anti-government groups. Topics covered include the background and history of terrorist and anti-government groups as well as the tactics of these groups. Second, the course takes the perspective of homeland security and law enforcement agencies proactively counteracting the threats to public safety that they groups may pose.
Prereq.: CRJS 1500, PHLT 1531, OR graduate student status.

CRJS 5865  Gathering and Using Information in Criminal Justice  3 s.h.
Specialized communication skills to prepare criminal justice practitioners in information-gathering techniques, written presentation techniques, verbal and nonverbal communication skills within constitutional guidelines.
Prereq.: CRJS 3712 or CRJS 3765.

CRJS 5875  Juvenile Justice System  3 s.h.
In-depth analysis of the specialized agencies and procedures developed to deal with problems of juveniles from a historical and philosophical perspective. Consideration of the juvenile court, community-based programs, institutionalization.
Prereq.: Senior standing.

CRJS 5892  Comparative and International Criminal Justice Systems  3 s.h.
An examination of how countries' criminal justice systems are shaped and molded by elements of culture, religion, and political ideology of the area. Emphasis will be placed on comparing and contrasting the selected countries' criminal justice systems with those found in the United States of America.
Prereq.: Senior standing or permission of the chair.

CRJS 6910  Law and Criminal Justice  3 s.h.
An historical analysis of criminal law as a social control. An overview of substantive criminal law and criminal procedural law in the United States.

CRJS 6915  Advanced Criminology  3 s.h.
A comprehensive analysis of the causes of crime from an interdisciplinary perspective. Major criminological theories are considered in light of contemporary empirical research.
Prereq.: CRJS 3735 or equivalent or permission of the Graduate Coordinator.

CRJS 6920  Criminal Justice Studies, Practices, and Theories  3 s.h.
A critical analysis of the field of criminal justice studies including crime statistics, crime causation, the criminal justice process, and the agencies involved.
Prereq.: CRJS 1500.

CRJS 6925  Administration and Management Theory  3 s.h.
Administration and management theory as applied to criminal justice agencies. Includes the functions of the executive, the nature of authority and leadership, organizational communication, and theories of employee motivation.

CRJS 6940  Statistical Techniques in Health and Human Services  3 s.h.
A consideration of the courses of statistical information in the human resource systems and the limits of such data, with primary emphasis upon multivariate statistics and their application to the field.
CRJS 6942  Research and Statistics in Health and Human Services  3 s.h.
A consolidated statistical and research course in human services to design
and use qualitative and quantitative research, use and interpret descriptive and
inferential statistics, and evaluate the research of others.

CRJS 6945  Research Methods in Health and Human Services  3 s.h.
An analysis of the design and execution of both quantitative and qualitative
research in the human services, and the development of research designs
most useful to human services research problems.

CRJS 6950  Selected Topics in Criminal Justice  3 s.h.
Addresses specific topics relating to the justice process. The topics may vary from semester to semester and will be
announced prior to enrollment. This course is repeatable provided it is on
different topics.

CRJS 6950D  Selected Topics Seminar in Criminal Justice Drugs and
Crime  3 s.h.
Addresses specific topics relating to the crime problem and the criminal
justice process. The topics may vary from semester to semester and will be
announced prior to enrollment. This course is repeatable provided it is on
different topics.

CRJS 6950E  Selected Topics Seminar in Criminal Justice Terrorism and
Countersurveillance  3 s.h.
Addresses specific topics relating to the crime problem and the criminal
justice process. The topics may vary from semester to semester and will be
announced prior to enrollment. This course is repeatable provided it is on
different topics.

CRJS 6950H  Selected Topics Seminar in Criminal Justice Critical Incidents
Management in Homeland Security  3 s.h.
Addresses specific topics relating to the crime problem and the criminal
justice process. The topics may vary from semester to semester and will be
announced prior to enrollment. This course is repeatable provided it is on
different topics.

CRJS 6955  Independent Study  3 s.h.
Study under the supervision of a faculty member with the approval of
the graduate director. May be repeated once.

CRJS 6957  Readings in Criminal Justice  1-4 s.h.
Extensive reading assignments in the student’s interest area under the
supervision of a graduate faculty member. May be repeated for no more than a
total of six semester hours.
Prereq.: Approval of graduate director.

CRJS 6960  Program Planning and Evaluation  3 s.h.
A systematic review and evaluation of human services programs with special
emphasis on the posting of questions in context; questions relating to the
selections of design, method, and process of summative evaluation; and
assessing the effectiveness of programs.

CRJS 6970  Applied Police Management  3 s.h.
Systematic examination of the principles and practices related to the
management of police organizations. Examples will reflect problems of the
urban and suburban environments, relationships with political entities, and
internal control.

CRJS 6971  Human Resources in Policing  3 s.h.
Evaluation of police personnel systems, employment qualifications, psychiatric
screening, polygraph examination, minority recruitment, and police cadet
systems, personnel costs, educational requirements, lateral entry, mandated
state minimum training standards, and federal involvement in police
manpower.

CRJS 6975  Applied Police Correction Management  3 s.h.
Systematic examinations of the principles and practices of criminal justice
organizations and the historical contexts of their implementation. Readings
emphasize best practices, legal standards, and interdisciplinary cooperation
affecting law enforcement and corrections, especially as they affect financial
management, human resources, community relations, homeland security, and
the treatment of vulnerable populations.

CRJS 6980  Managing Correctional Operations  3 s.h.
Historical review of corrections in the United States. Modern theories of
rectional administration and organization in both facilities and community
settings. Special focus on financial operations, contagious illnesses, security,
staff management, corruption, programming, architecture, hostage situations,
and community concerns.

CRJS 6981  Correctional Case Management  3 s.h.
Case management, presentencing investigation, classification, and risk
Special focus on training, recreation, health care and mental health services,
religious programs, and specials needs offenders, including sexual and drug
offenders.

CRJS 6985  Grant Writing  3 s.h.
Insight into the methods, strategies, and techniques of grant writing, with
emphasis on the proposal components and exploration of funding sources.
Each student will exhibit competence in planning, developing, and evaluating
a proposal as well as creating a draft of a grant proposal based on an actual
Request for Proposals.

CRJS 6990  Criminal Justice Public Policy Seminar  3 s.h.
Types of policy and how policies are formulated are covered. The evaluation of
policy, with attention to what constitutes good public policy. Special attention
is given to the impact of crime control policies, particularly crime legislation
and current laws.

CRJS 6995  Criminal Justice Practicum  3-6 s.h.
Supervised experience in an applied criminal justice setting. Permit required.
Prereq.: Majority of core and track courses completed and the
recommendation of student’s committee and approval by graduate director.

CRJS 6998  Graduate Paper  2 s.h.
Graduate-level research and a comparable paper under the supervision of the
student’s major professor. 2 s.h.

CRJS 6999  Research and Thesis  1-6 s.h.

**Hospitality Management**

HMGT 1500  Introduction to Hospitality Industry  3 s.h.
General overview of the hospitality industry with perspectives on the
organizational structure, operations, management and various associated
issues.

HMGT 2603  Hospitality Managerial Accounting  1  4 s.h.
Using the "Uniform System of Accounting for Small Hotels, Motels, and Motor
Hotels," introduces the unique requirements of hospitality industry record
keeping. Focus on using financial data to safeguard assets, control costs,
budget and plan, and practice yield management.
Prereq.: MATH 1552 or MATH 2623.

HMGT 2622  Hotel Management  3 s.h.
The role of service departments within a hotel, such as housekeeping, front
office, security (or night audits), and concierge. Topics include: fundamental
lodging classifications and brands in the lodging industry, recent trends, the
relationship between the hotel rooms department and other departments.
Prereq.: HMGT 1500 or HMGT 1501.

HMGT 2634  Hospitality Management Information Systems  3 s.h.
Overview of the management information systems of hotels, restaurants, and
other hospitality industries.
Prereq.: CSIS 1514.

HMGT 2691  Hospitality Cooperative Work Experience  3 s.h.
Work experience in which the student assumes supervisory responsibilities
within an assigned food-service or lodging facility. One hour seminar and 20
hours work experience per week.
Prereq.: "C" or better in HMGT 1550 and HMGT 1500; 2.0 GPA.
HMGT 3719 Facilities Management 4 s.h.
Maintenance, engineering and security principles for lodging and food service properties. Technical information, preventive maintenance, engineering, housekeeping and security department roles; security techniques used to enhance safety of persons and property, including loss prevention, administration, organization, emergency planning, and liability.
Prereq.: HMGT 1500 or HMGT 1501.

HMGT 3725 Food and Beverage Management 3 s.h.
Managerial authority and responsibilities in setting goals, forecasting, controlling quality and costs, establishing policy in the successful operation of a food and beverage department. Two hours lecture, two hours lab.
Prereq.: FNTU 2612.

HMGT 3734 Front Office Operation 3 s.h.
Advanced study of the front-office management from reservations through checkout including the property management systems, central reservation system, and their impacts on other lodging operations.
Prereq.: "C" or better in HMGT 2622.

HMGT 3745 Hospitality Marketing and Sales 4 s.h.
Basic concepts and practices of modern hospitality marketing, which enable students to develop strategic and operating marketing plans for hospitality industries.
Prereq.: "C" or better in HMGT 1500 or HMGT 1501.

HMGT 4804 Hospitality Industry Law and Ethics 3 s.h.
Legal aspects of managing a hotel, resort, or restaurant. Provides an understanding of preventative measures to avoid or successfully deal with litigation. Includes legal research, licensing, innkeepers' obligations.
Prereq.: MGT 2604; "C" or better in HMEC 1550 and HMGT 3719.

HMGT 4846 Event Management 3 s.h.
Focus on the career of meeting and convention management, includes adult learning theory, finance, promotion, post-meeting evaluation, facility selection, budgeting, exhibit management, physical facilities, pre-event planning.
Prereq.: MKTG 3703 or "C" or better in HMGT 3745.

HMGT 4896 Hospitality Operations Management 3 s.h.
Capstone course requiring a broad application of knowledge and skills. Students solve operational dilemmas and make decisions reflecting the diverse nature of managing a hotel, resort, and food-service property.
Prereq.: "C" or better in HMGT 2691 and CHFM 3731.

Merchandising: Fashion and Interiors

MRCH 1506 Clothing and Image Development 3 s.h.
Purpose and meaning of dress and adornment as a means of communication and social identity.

MRCH 1508 Apparel Production 3 s.h.
Methods, materials and the fundamental techniques and skills required in the production of apparel. Two hours lecture, three hours lab per week.

MRCH 1510 Apparel Evaluation 3 s.h.
Analysis and evaluation of aspects of garment construction and styling relating to making merchandising decisions.

MRCH 2625 The World of Fashion 3 s.h.
Overview of fashion-influenced industries: Textiles, Apparel, Accessories, and Home Furnishings.

MRCH 2661 Fundamentals of Interior Design 3 s.h.
Studio course in theory, elements and principles of interior design. An introduction to planning, materials, furnishings, work methods, and problem solving to meet human needs. Introduces architectural drafting including plans, elevations, details and basic drafting skills within the context of interior design.

MRCH 2662 Computer Applications for Housing and Interiors 3 s.h.
Computer-aided drafting and design using the basic commands of AutoCAD to produce architectural and interior drawings, including dimensional plans, evaluations, and details. Two hours lecture and 3 hours lab per week.

MRCH 2663 Materials and Methods 3 s.h.
Principles and functions of materials and methods used in the construction of furnishings and housing materials. Raw materials, selection, use, care, and selling points of paper, leather, fur, woods, metals, glass, ceramics, and plastics. Examines the furnishings industry with emphasis on forecasting, planning, selecting, negotiating, pricing, and recording merchandise.
Prereq.: MRCH 2662.

MRCH 3705 Fashion Textiles 3 s.h.
Study of textiles, including their characteristics, functions, purposes, and care. Fibers, yarns, construction, finishes, and textile legislation. Two hours lecture, two hours lab.
Prereq.: CHEM 1500, CHEM 1500L or CHEM 1505, CHEM 1505L.

MRCH 3713 Merchandise Buying 3 s.h.
Strategies and philosophies of merchandise selection. Topics examined include the organization of the buying function, determining what to buy based on customer needs, visiting the market, vendor analysis and selection, and the buyer's responsibilities in other areas of the firm. The product dimension and global sourcing are explored in depth.
Prereq.: MATH 2623 or MATH 1570; CSIS 1514 and MRCH 2625.

MRCH 3715 Fashion Promotion and Fashion Show Production 3 s.h.
Explorations of how the fashion industry creates awareness and stimulates customer demand through advertising campaigns, sales promotion, public relations and fashion shows. Discussions on ethical considerations in fashion promotion. Detailed deliberations and hands-on-activities on production and execution of a fashion show to promote fashion goods while engaging the community in philanthropy.
Prereq.: MKTG 3703 or MRCH 2625 or MRCH 1506.

MRCH 3730 Social Psychology of Clothing and Appearance 3 s.h.
Interdisciplinary study of clothing and appearance within contexts of cultural, social-psychological, physical, and aesthetic relationships. Emphasize origins and motives of dress and adornment, relationship of clothing and appearance to self, and appearance as a factor in interpersonal and collective behavior. Explicitly connects the fields of fashion and social psychology.
Prereq.: ENGL 1551, PSYC 1560 and SOC 1500.

MRCH 3740L Computer Applications for Textiles & Apparel Lab 3 s.h.
Exploration of computer and software applications used in the fashion industry. The use of computer-aided design (CAD) to produce technical drawings, sketches, color stories and textile prints for design and merchandising presentations. Two hours lecture, three hours lab.
Prereq.: MRCH 1506 or MRCH 2661.

MRCH 3742 Applied Textile Design 3 s.h.
Use of color application and needlework processes in production of clothing and home furnishings. Exploration into the process of fabric design as a part of textile end product development. Students will design their own fabrics and textile products using dyeing, printing and needlework methods. Two hours lecture, three hours lab.
Prereq.: MRCH 1506.

MRCH 3745 Product Line Development 3 s.h.
The theory and practice of sewn products development. Includes technology applications and practical experience in product development for fashion influenced textile goods. 2 hours lecture & 3 hours lab.
Prereq.: MRCH 1508 or MRCH 1506 or MRCH 2661.

MRCH 3760 Visual Merchandising 3 s.h.
Evaluation and creation of visual displays for the purpose of selling fashion, home furnishings, and other merchandise. Independent and cooperative work in analyzing store displays in the field, making recommendations for fixtures and displays, creating class projects, and working on visual displays and plans. Two hours lecture, two hours lab.
Prereq.: MRCH 1506 or MRCH 2661.

MRCH 3764 Family Housing and Technology 3 s.h.
Planning the home environment to meet family needs and resources; consumer decisions in selection of residences, floor plans, and household technology.
Prereq.: SOC 1500.
Student Learning Outcomes (SLO)

The SLOs for majors within the Criminal Justice and Consumer Sciences Department are as follows:

**Criminal Justice**
- Students will identify the key aspects to the elements of law (Certificate in Basic Police Training and job preparation).
- Students will develop knowledge about criminological theories and public policy practices (legal, economic, and social) that influence the American Criminal Justice and Forensic Sciences system (Associate of Applied Science degree in Criminal Justice and Forensic Science).
- Students will communicate their knowledge about criminological theories and public policy practices (legal, economic, and social) that influence the institutions of the American Criminal Justice and Forensic Sciences system (Bachelor of Science in Applied Science in Criminal Justice and Forensic Science).
- Students will understand the basic principles of the scientific disciplines (i.e. chemistry and biology) included in their curriculum. (Bachelor of Science in Applied Science in Forensic Science).

**Hospitality Management**
- Demonstrate appropriate customer and guest service practices, skills and behaviors required during customer involvement that contribute to customer satisfaction.
- Demonstrate the knowledge of fundamental principles of leadership and the ability to work with a group of people to formulate rational solutions to hospitality operational problems.
- Demonstrate quality food preparation and presentation skills, using appropriate health, safety, sanitation, and environmental protection procedures in hospitality.

**Associate of Applied Science in Criminal Justice, Corrections Track**

The Associate of Applied Science (AAS) degree in Criminal Justice is considered appropriate for persons preparing for employment in many municipal, state, and private police agencies as well as persons considering employment in local, state, federal, and private correctional facilities. The associate degree also is a stepping stone for those students who plan to go on for a bachelor’s degree. The associate degree in Criminal Justice has three tracks:

- law enforcement track
- corrections track
- loss prevention/assets protection track

The program requires 60 semester hours:

- 34 hours in general degree requirements
- 18 hours in Criminal Justice and Forensic Sciences core courses
- 8 hours in the selected track

The Associate of Applied Science degree can be completed in four semesters if students average 15 hours per semester.

Transfer students must take at least 20 hours of YSU courses. Sixteen (16) semester hours of Criminal Justice and Forensic Sciences course work must be taken at Youngstown State University.

The associate degree is built upon core/track concept with emphasis (track) areas in:
- law enforcement
- corrections
- loss prevention/assets protection

Core courses for an associate degree are:

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<th>COURSE</th>
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<tr>
<td>CJFS 2601</td>
<td>Policing</td>
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<td>CJFS 2602</td>
<td>Criminal Courts</td>
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<td>CJFS 2603</td>
<td>Corrections</td>
<td>3</td>
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<tr>
<td>CJFS 3735</td>
<td>Crime and Delinquency</td>
<td>3</td>
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<tr>
<td>CJFS 3719</td>
<td>Criminal Law</td>
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Students choose an additional 12 credit hours from one of the emphasis areas. See department for course options.
Associate of Applied Science in Criminal Justice, Loss Prevention/Assets Protection Track

The Associate of Applied Science (AAS) degree in Criminal Justice is considered appropriate for persons preparing for employment in many municipal, state, and private police agencies as well as persons considering employment in local, state, federal, and private correctional facilities. The associate degree also is a stepping stone for those students who plan to go on for a bachelor's degree. The associate degree in Criminal Justice has three tracks:

- law enforcement track
- corrections track
- loss prevention/assets protection track

The program requires 60 semester hours:

- 34 hours in general degree requirements
- 18 hours in Criminal Justice and Forensic Sciences core courses
- 8 hours in the selected track

The Associate of Applied Science degree can be completed in four semesters if students average 15 hours per semester.

Transfer students must take at least 20 hours of YSU courses. Sixteen (16) semester hours of Criminal Justice and Forensic Sciences course work must be taken at Youngstown State University.

The associate degree is built upon core/track concept with emphasis (track) areas in:

- law enforcement
- corrections
- loss prevention/assets protection

Core courses for an associate degree are:

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<tr>
<td>CJFS 1500</td>
<td>Introduction to Criminal Justice</td>
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<td>Policing</td>
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<td>Elective</td>
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<td>Corrections Track</td>
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<td>Select 12 s.h. from the following:</td>
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<td>CJFS 3702</td>
<td>Correctional Strategies</td>
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<td>CJFS 3702L</td>
<td>and Correctional Strategies Laboratory</td>
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<tr>
<td>CJFS 3715</td>
<td>Criminal Justice Management Concepts</td>
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<td>CJFS 3736</td>
<td>Criminal Victimization</td>
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<td>CJFS 3740</td>
<td>Criminal Justice Information Systems</td>
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<td>CJFS 3765</td>
<td>Human Relations</td>
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<td>CJFS 4803</td>
<td>Correctional Case Management and Treatment</td>
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Total Semester Hours 74-76

Learning Outcomes
1. Students can discriminate the influence of the CJ system at the subsystem levels (policing, courts, and corrections).
2. Students can apply CJ theories.
3. Students can analyze legal situations.

Associate of Applied Science in Criminal Justice, Loss Prevention/Assets Protection Track

The Associate of Applied Science (AAS) degree in Criminal Justice is considered appropriate for persons preparing for employment in many municipal, state, and private police agencies as well as persons considering employment in local, state, federal, and private correctional facilities. The associate degree also is a stepping stone for those students who plan to go on for a bachelor's degree. The associate degree in Criminal Justice has three tracks:
Learning Outcomes
1. Students can discriminate the influence of the CJ system at the subsystem levels (policing, courts, and corrections).
2. Students can apply CJ theories.
3. Students can analyze legal situations.

Associate of Applied Science in Criminal Justice, Law Enforcement Track

The Associate of Applied Science (AAS) degree in Criminal Justice is considered appropriate for persons preparing for employment in many municipal, state, and private police agencies as well as persons considering employment in local, state, federal, and private correctional facilities. The associate degree also is a stepping stone for those students who plan to go on for a bachelor’s degree. The associate degree in Criminal Justice has three tracks:

- law enforcement track
- corrections track
- loss prevention/assets protection track

The program requires 60 semester hours:

- 34 hours in general degree requirements
- 18 hours in Criminal Justice and Forensic Sciences core courses
- 8 hours in the selected track

The Associate of Applied Science degree can be completed in four semesters if students average 15 hours per semester.

Transfer students must take at least 20 hours of YSU courses. Sixteen (16) semester hours of Criminal Justice and Forensic Sciences course work must be taken at Youngstown State University.

The associate degree is built upon core/track concept with emphasis (track) areas in:

- law enforcement
- corrections
- loss prevention/assets protection

Core courses for an associate degree are:

<table>
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<th>COURSE</th>
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<tbody>
<tr>
<td>CJFS 1500</td>
<td>Introduction to Criminal Justice (First Year Experience)</td>
<td>3</td>
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<tr>
<td>CJFS 2601</td>
<td>Policing</td>
<td>3</td>
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<tr>
<td>CJFS 2602</td>
<td>Criminal Courts</td>
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<tr>
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<td>Corrections</td>
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<tr>
<td>CJFS 3735</td>
<td>Crime and Delinquency</td>
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</tr>
<tr>
<td>CJFS 3719</td>
<td>Criminal Law</td>
<td>3</td>
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Students choose an additional 12 credit hours from one of the emphasis areas. See department for course options.

<table>
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<tr>
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<tbody>
<tr>
<td>YSU 1500</td>
<td>Success Seminar</td>
<td>1-2</td>
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<tr>
<td>or SS 1500</td>
<td>Strong Start Success Seminar</td>
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</tr>
<tr>
<td>or HONR 1500</td>
<td>Intro to Honors</td>
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General Education Requirements

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<tbody>
<tr>
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<td>Writing 1</td>
<td>3-4</td>
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<tr>
<td>or ENGL 1549</td>
<td>Writing 1 with Support</td>
<td></td>
</tr>
<tr>
<td>ENGL 1551</td>
<td>Writing 2</td>
<td>3</td>
</tr>
<tr>
<td>CMST 1545</td>
<td>Communication Foundations</td>
<td>3</td>
</tr>
<tr>
<td>SOC 1500</td>
<td>Introduction to Sociology</td>
<td>3</td>
</tr>
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<td>Arts and Humanities</td>
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<td>General Psychology</td>
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<tr>
<td>PHIL 2625</td>
<td>Introduction to Professional Ethics</td>
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Natural Sciences (with lab)

- 4

<table>
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<tr>
<td>CJFS 1500</td>
<td>Introduction to Criminal Justice (First Year Experience)</td>
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<tr>
<td>CJFS 2601</td>
<td>Policing</td>
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<td>CJFS 2602</td>
<td>Criminal Courts</td>
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<tr>
<td>CJFS 3719</td>
<td>Criminal Law</td>
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Elective

- 4

Law Enforcement Track

Select 12 s.h. from the following:

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<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
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<tbody>
<tr>
<td>CJFS 1510</td>
<td>Survey of Forensic Science</td>
<td></td>
</tr>
<tr>
<td>CJFS 3700</td>
<td>Forensic Fire and Explosives Investigation</td>
<td></td>
</tr>
<tr>
<td>CJFS 3714 &amp; 3714L</td>
<td>Forensic Science: Crime Scene Investigation and Forensic Science: Crime Scene Investigation Laboratory</td>
<td></td>
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<tr>
<td>CJFS 3715</td>
<td>Criminal Justice Management Concepts</td>
<td></td>
</tr>
<tr>
<td>CJFS 3736</td>
<td>Criminal Victimization</td>
<td></td>
</tr>
<tr>
<td>CJFS 3740</td>
<td>Criminal Justice Information Systems</td>
<td></td>
</tr>
<tr>
<td>CJFS 3765</td>
<td>Human Relations</td>
<td></td>
</tr>
<tr>
<td>CJFS 3777</td>
<td>Ohio Peace Officer Basic Training</td>
<td></td>
</tr>
<tr>
<td>CJFS 4870</td>
<td>Law Enforcement Administration</td>
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Total Semester Hours

- 77-79

Learning Outcomes
1. Students can discriminate the influence of the CJ system at the subsystem levels (policing, courts, and corrections).
2. Students can apply CJ theories.
3. Students can analyze legal situations.
4. Students can assess public policy as it relates to the CJ system.
Bachelor of Science in Applied Science in Criminal Justice, Generalist Track

A Bachelor of Science in Applied Science (BSAS) degree in Criminal Justice requires a minimum of 120 semester hours. All Bachelor of Science in Applied Science students must complete a minimum of 45 semester hours of Criminal Justice courses of which 36 semester hours or more must be taken from upper-division courses. The courses are listed as CJFS courses. This degree can be earned in eight semesters if students average 15 hours per semester.

Transfer students must complete a minimum of 18 hours in Criminal Justice and Forensic Sciences courses at YSU. All majors must complete:

- the core requirements:

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>CJFS 1500</td>
<td>Introduction to Criminal Justice</td>
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<tr>
<td>CJFS 2601</td>
<td>Policing</td>
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<tr>
<td>CJFS 2602</td>
<td>Criminal Courts</td>
<td>3</td>
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<tr>
<td>CJFS 2603</td>
<td>Corrections</td>
<td>3</td>
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<tr>
<td>CJFS 2610</td>
<td>Social Statistics</td>
<td>3</td>
</tr>
<tr>
<td>CJFS 2612</td>
<td>Criminal Justice Research</td>
<td>3</td>
</tr>
<tr>
<td>CJFS 2615</td>
<td>Criminal Justice Management Concepts</td>
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<tr>
<td>CJFS 2619</td>
<td>Criminal Law</td>
<td>3</td>
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<tr>
<td>CJFS 2635</td>
<td>Crime and Delinquency</td>
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</tr>
<tr>
<td>CJFS 4800</td>
<td>Senior Seminar</td>
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</table>

Generalist Track

A generalist track is available for transfer students and students seeking a nontraditional area of study such as victim’s rights and juvenile justice. This track is available to students at institutions participating in the interactive distance learning (IDL) agreements with the University. Department approval and 15 hours of course work are required.

A grade of C or better must be received in each required Criminal Justice and Forensic Sciences course in order to satisfy the departmental requirements for the degree.

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>YSU 1500</td>
<td>Success Seminar</td>
<td>1-2</td>
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<td>or SS 1500</td>
<td>Strong Start Success Seminar</td>
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<td>or HONR 1500</td>
<td>Intro to Honors</td>
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General Education Requirements

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<th>COURSE</th>
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<tbody>
<tr>
<td>ENGL 1550</td>
<td>Writing 1</td>
<td>3-4</td>
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<tr>
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<td>Writing 1 with Support</td>
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<tr>
<td>ENGL 1551</td>
<td>Writing 2</td>
<td>3</td>
</tr>
<tr>
<td>CMST 1545</td>
<td>Communication Foundations</td>
<td>3</td>
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<tr>
<td>Any GER MATH course</td>
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<td>3-4</td>
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<tr>
<td>PSYC 1560</td>
<td>General Psychology (required for major)</td>
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</tr>
<tr>
<td>SOC 1500</td>
<td>Introduction to Sociology (required for major)</td>
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</tr>
<tr>
<td>PHIL 2625</td>
<td>Introduction to Professional Ethics (required for major)</td>
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<td>or PHIL 2627</td>
<td>Law and Criminal Justice Ethics</td>
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<tr>
<td>Arts and Humanities (1 course)</td>
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<tr>
<td>Natural Science (2 courses, 1 with lab)</td>
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<tr>
<td>Social and Personal Awareness (2 courses)</td>
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Major Requirements

<table>
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<tbody>
<tr>
<td>CJFS 1500</td>
<td>Introduction to Criminal Justice</td>
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<tr>
<td>CJFS 2601</td>
<td>Policing</td>
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<td>Criminal Courts</td>
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<td>CJFS 2610</td>
<td>Social Statistics</td>
<td>3</td>
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<tr>
<td>CJFS 2612</td>
<td>Criminal Justice Research</td>
<td>3</td>
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<tr>
<td>CJFS 2615</td>
<td>Criminal Justice Management Concepts</td>
<td>3</td>
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<tr>
<td>CJFS 2619</td>
<td>Criminal Law</td>
<td>3</td>
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<td>CJFS 2635</td>
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</tr>
<tr>
<td>CJFS 4800</td>
<td>Senior Seminar</td>
<td>3</td>
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</table>

Criminal Justice Upper Division Electives, 37XX or higher - 12 s.h.  
Elective or (Optional) Minor must have 29 s.h. total

Select 29 s.h. of Minor or additional electives.

Generalist Emphasis - 12 s.h.

<table>
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<tr>
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<tbody>
<tr>
<td>CJFS 37XX</td>
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<tr>
<td>CJFS 37XX</td>
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<tr>
<td>CJFS 48XX/58XX</td>
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</table>

Total Semester Hours 120-124

1 Capstone course.
2 Must have approval from CJFS Chair. Generalist emphasis is not eligible for CJFS 3777.
3 Alternate option is to complete OPPTA.

Year 1

Fall

<table>
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<tr>
<th>COURSE</th>
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<tr>
<td>YSU 1500</td>
<td>Success Seminar</td>
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<tr>
<td>ENGL 1550</td>
<td>Writing 1</td>
<td>3-4</td>
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<tr>
<td>or ENGL 1549</td>
<td>Writing 1 with Support</td>
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</tr>
<tr>
<td>CJFS 1500</td>
<td>Introduction to Criminal Justice</td>
<td>3</td>
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<tr>
<td>Any GER MATH course</td>
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<tr>
<td>SOC 1500</td>
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Semester Hours 13-15

Spring

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<td>CJFS 2602</td>
<td>Criminal Courts</td>
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<tr>
<td>CJFS 2601</td>
<td>Policing</td>
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<td>PSYC 1560</td>
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Semester Hours 16

Year 2

Fall

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<tr>
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<td>Communication Foundations</td>
<td>3</td>
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<td>CJFS 2603</td>
<td>Corrections</td>
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<tr>
<td>CJFS 3719</td>
<td>Criminal Law</td>
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<tr>
<td>CJFS 3700 or higher-Level Elective</td>
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Semester Hours 15

Spring

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<tbody>
<tr>
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<td>CJFS 3735</td>
<td>Crime and Delinquency</td>
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<tr>
<td>CJFS 3700 or higher-Level Elective</td>
<td>3</td>
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<td>PHIL 2625</td>
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Semester Hours 15
Year 3

Fall

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<td>C J F S 3 7 1 0</td>
<td>Social Statistics</td>
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<td>C J F S 3 7 0 0 or higher-Level Elective</td>
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<td>Natural Science</td>
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<td>Social and Personal Awareness</td>
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Semester Hours 15

Spring

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<td>C J F S 3 7 1 0</td>
<td>Social Statistics</td>
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<td>C J F S 3 7 0 0 or higher-Level Elective</td>
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Semester Hours 15

Year 4

Fall

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<td>C J F S 4 8 0 0</td>
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Semester Hours 15

Spring

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Semester Hours 15

Total Semester Hours 119-121

Learning Outcomes

1. Students can discriminate the influence of the CJ system at the subsystem levels (policing, courts, and corrections).
2. Students can apply CJ theories.
3. Students can analyze legal situations.
4. Students can assess public policy as it relates to the CJ system.

Bachelor of Science in Applied Science in Criminal Justice, Corrections Track

A Bachelor of Science in Applied Science (BSAS) degree in Criminal Justice requires a minimum of 120 semester hours. All Bachelor of Science in Applied Science students must complete a minimum of 45 semester hours of Criminal Justice courses of which 36 semester hours or more must be taken from upper-division courses. The courses are listed as C J F S courses. This degree can be earned in eight semesters if students average 15 hours per semester.

Transfer students must complete a minimum of 18 hours in Criminal Justice courses at YSU. All majors must complete:

- the core requirements:
  - C J F S 1 5 0 0 Introduction to Criminal Justice 3
  - C J F S 2 6 0 1 Policing 3
  - C J F S 2 6 0 2 Criminal Courts 3

C O U R S E   T I T L E   S.H.
C J F S 2 6 0 3 Corrections 3
C J F S 3 7 1 0 Social Statistics 3
C J F S 3 7 1 2 Criminal Justice Research 3
C J F S 3 7 1 5 Criminal Justice Management Concepts 3
C J F S 3 7 1 9 Criminal Law 3
C J F S 3 7 3 5 Crime and Delinquency 3
C J F S 4 8 0 0 Senior Seminar 3

The purpose of each emphasis area is as follows:

Corrections Track

The corrections track is offered for students preparing for a career in probation, parole, or institutional services with either adults or juveniles. Courses required:

C O U R S E   T I T L E   S.H.
C J F S 3 7 0 2 Correctional Strategies 6
C J F S 5 8 0 2 Corrections Law and Liability 3
C J F S 4 8 0 3 Correctional Case Management and Treatment 3

A grade of C or better must be received in each required Criminal Justice and Forensic Sciences course in order to satisfy the departmental requirements for the degree.

C O U R S E   T I T L E   S.H.
Y S U 1 5 0 0 Success Seminar 1-2
Y S U 1 5 0 0 or SS 1 5 0 0 Strong Start Success Seminar
H O N R 1 5 0 0 Intro to Honors

General Education Requirements

C O U R S E   T I T L E   S.H.
E N G L 1 5 5 0 Writing 1 3-4
E N G L 1 5 4 9 Writing 1 with Support
E N G L 1 5 5 1 Writing 2 3
C M S T 1 5 4 5 Communication Foundations 3
A n y G E R M A T H course 3-4
P S Y C 1 5 6 0 General Psychology (required for major) 3
S O C 1 5 0 0 Introduction to Sociology (required for major) 3
P H I L 2 6 2 5 Introduction to Professional Ethics (required for major) 3
P H I L 2 6 2 7 Law and Criminal Justice Ethics 3
A r t s a n d H u m a n i t i e s (1 course) 3
N a t u r a l S c i e n c e (2 courses, 1 with lab) (6-7 s.h.) 6-7
S o c i a l a n d P e r s o n a l A w a reness (2 courses) 6

M a j o r Requirements

C O U R S E   T I T L E   S.H.
C J F S 1 5 0 0 Introduction to Criminal Justice 3
C J F S 2 6 0 1 Policing 3
C J F S 2 6 0 2 Criminal Courts 3
C J F S 2 6 0 3 Corrections 3
C J F S 3 7 1 0 Social Statistics 3
C J F S 3 7 1 2 Criminal Justice Research 3
C J F S 3 7 1 5 Criminal Justice Management Concepts 3
C J F S 3 7 1 9 Criminal Law 3
C J F S 3 7 3 5 Crime and Delinquency 3
C J F S 4 8 0 0 Senior Seminar 3

Corrections Track

C O U R S E   T I T L E   S.H.
C J F S 3 7 0 2 Correctional Strategies 4
C J F S 3 7 0 2 L Correctional Strategies Laboratory 2
Bachelor of Science in Applied Science in Criminal Justice, Law Enforcement Track

A Bachelor of Science in Applied Science (BSAS) degree in Criminal Justice requires a minimum of 120 semester hours. All Bachelor of Science in Applied Science students must complete a minimum of 45 semester hours of Criminal Justice courses of which 36 semester hours or more must be taken from upper-division courses. The courses are listed as CJFS courses. This degree can be earned in eight semesters if students average 15 hours per semester.

Transfer students must complete a minimum of 18 hours in Criminal Justice and Forensic Sciences courses at YSU. All majors must complete:

- core requirements:
  - **COURSE**
  - **TITLE**
  - **S.H.**
  - CJFS 1500 Introduction to Criminal Justice
  - CJFS 2601 Policing
  - CJFS 2602 Criminal Courts
  - CJFS 2603 Corrections
  - CJFS 3710 Social Statistics
  - CJFS 3712 Criminal Justice Research
  - CJFS 3715 Criminal Justice Management Concepts
  - CJFS 3719 Criminal Law
  - CJFS 3735 Crime and Delinquency
  - CJFS 4800 Senior Seminar

- courses required in the student's chosen emphasis area
- 15 hours of CJFS electives not in the emphasis area (as designated on the department's curriculum sheet)

### Year 1

#### Fall

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
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<tr>
<td>YSU 1500</td>
<td>Success Seminar</td>
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<td>3-4</td>
</tr>
<tr>
<td>CJFS 1500</td>
<td>Introduction to Criminal Justice</td>
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<td>SOC 1500</td>
<td>Introduction to Sociology</td>
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#### Spring

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<tbody>
<tr>
<td>ENGL 1551</td>
<td>Writing 2</td>
<td>3</td>
</tr>
<tr>
<td>CJFS 2602</td>
<td>Criminal Courts</td>
<td>3</td>
</tr>
<tr>
<td>CJFS 2601</td>
<td>Policing</td>
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</tr>
<tr>
<td>PSYC 1560</td>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>Natural Science Elective with Lab</td>
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</tr>
<tr>
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### Year 2

#### Fall

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>CMST 1545</td>
<td>Communication Foundations</td>
<td>3</td>
</tr>
<tr>
<td>CJFS 2603</td>
<td>Corrections</td>
<td>3</td>
</tr>
<tr>
<td>CJFS 3719</td>
<td>Criminal Law</td>
<td>3</td>
</tr>
<tr>
<td>CJFS 3700 or higher-Level Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Arts and Humanities</td>
<td>3</td>
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</tr>
<tr>
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#### Spring

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
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<tbody>
<tr>
<td>CJFS 3715</td>
<td>Criminal Justice Management Concepts</td>
<td>3</td>
</tr>
<tr>
<td>CJFS 3735</td>
<td>Crime and Delinquency</td>
<td>3</td>
</tr>
<tr>
<td>CJFS 3700 or higher-Level Elective</td>
<td>3</td>
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</tr>
<tr>
<td>PHIL 2625</td>
<td>Introduction to Professional Ethics</td>
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<tr>
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### Year 3

#### Fall

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<tbody>
<tr>
<td>CJFS 3702</td>
<td>Correctional Strategies</td>
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<tr>
<td>CJFS 3702L</td>
<td>Correctional Strategies Laboratory</td>
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<tr>
<td>CJFS 3710</td>
<td>Social Statistics</td>
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<tr>
<td>Social and Personal Awareness</td>
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<td>Elective</td>
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#### Spring

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</thead>
<tbody>
<tr>
<td>CJFS 3712</td>
<td>Criminal Justice Research</td>
<td>3</td>
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<tr>
<td>CJFS 3700 or higher-Level Elective</td>
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</tr>
<tr>
<td>Elective</td>
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### Learning Outcomes

1. Students can discriminate the influence of the CJ system at the subsystem levels (policing, courts, and corrections).
2. Students can apply CJ theories.
3. Students can analyze legal situations.
4. Students can assess public policy as it relates to the CJ system.
Law Enforcement Track

The law enforcement track is designed for persons preparing for employment in municipal, state, and private agencies; federal law enforcement agencies; homeland security; administrative positions in municipal or state agencies; or as instructors in police education programs.

Courses required:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CJFS 1510</td>
<td>Survey of Forensic Science</td>
<td>3</td>
</tr>
<tr>
<td>CJFS 3714 &amp; 3714L</td>
<td>Forensic Science: Crime Scene Investigation and Forensic Science: Crime Scene Investigation Laboratory</td>
<td>3</td>
</tr>
<tr>
<td>CJFS 3740</td>
<td>Criminal Justice Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>CJFS 5825</td>
<td>Criminal Procedures and Constitutional Issues</td>
<td>3</td>
</tr>
<tr>
<td>CJFS 4870</td>
<td>Law Enforcement Administration</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Semester Hours 15

A grade of C or better must be received in each required Criminal Justice and Forensic Sciences course in order to satisfy the departmental requirements for the degree.

Year 1

Fall

- YSU 1500 Success Seminar 1-2
- ENGL 1550 or ENGL 1549 Writing 1 or Writing 1 with Support 3-4
- CJFS 1500 Introduction to Criminal Justice 3
- Any GER MATH course (3-4 S.H) 3-4
- PSYC 1560 General Psychology 3

Semester Hours 13-15

Year 2

Fall

- CMST 1545 Communication Foundations 3
- CJFS 2603 Corrections 3
- CJFS 3719 Criminal Law 3
- CJFS 3700 or higher-Level Elective 3
- Arts and Humanities 3

Semester Hours 15

Spring

- CJFS 3715 Criminal Justice Management Concepts 3
- CJFS 3735 Crime and Delinquency 3
- CJFS 3700 or higher-Level Elective 3
- CJFS 3700 or higher-Level Elective 3
- PHIL 2625 Introduction to Professional Ethics 3

Semester Hours 15

Year 3

Fall

- Natural Science 3
- CJFS 3710 Social Statistics 3
- CJFS 1510 Survey of Forensic Science 3
- Social and Personal Awareness Elective 3

Semester Hours 15

Spring

- CJFS 3714 Forensic Science: Crime Scene Investigation 2
- CJFS 3714L Forensic Science: Crime Scene Investigation Laboratory 1
- CJFS 3740 Criminal Justice Information Systems 3

Semester Hours 15

Electives or (Optional) Minor-must have 28 s.h. total
- Select 28 s.h. of Minor or additional electives. 28
Bachelor of Science in Applied Science in Criminal Justice, Legal Process Track

Elective 3
CJFS 3712 Criminal Justice Research 3

Semester Hours 15

Year 4
Fall
CJFS 3700 or higher-Level Elective 3
CJFS 3700 or higher-Level Elective 3
Elective 3
Elective 3
Elective 3
OR
CJFS 3777 (16 s.h.)
OR
CJFS 4807 (3-12 s.h.)

Semester Hours 15

Spring
CJFS 4870 Law Enforcement Administration 3
3700 or higher-Level Elective 3
CJFS 4800 3
Elective 3
CJFS 5825 Criminal Procedures and Constitutional Issues 3

Semester Hours 15

Total Semester Hours 119-121

Learning Outcomes
1. Students can discriminate the influence of the CJ system at the subsystem levels (policing, courts, and corrections)
2. Students can apply CJ theories.
3. Students can analyze legal situations.
4. Students can assess public policy as it relates to the CJ system.

Bachelor of Science in Applied Science in Criminal Justice, Legal Process Track

A Bachelor of Science in Applied Science (BSAS) degree in Criminal Justice requires a minimum of 120 semester hours. All Bachelor of Science in Applied Science students must complete a minimum of 45 semester hours of Criminal Justice courses of which 36 semester hours or more must be taken from upper-division courses. The courses are listed as CJFS courses. This degree can be earned in eight semesters if students average 15 hours per semester.

Transfer students must complete a minimum of 18 hours in Criminal Justice and Forensic Sciences courses at YSU (see University-wide residency requirement). All majors must complete:

- the core requirements:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CJFS 2601</td>
<td>Policing</td>
<td>3</td>
</tr>
<tr>
<td>CJFS 2602</td>
<td>Criminal Courts</td>
<td>3</td>
</tr>
<tr>
<td>CJFS 2603</td>
<td>Corrections</td>
<td>3</td>
</tr>
<tr>
<td>CJFS 3710</td>
<td>Social Statistics</td>
<td>3</td>
</tr>
<tr>
<td>CJFS 3712</td>
<td>Criminal Justice Research</td>
<td>3</td>
</tr>
<tr>
<td>CJFS 3715</td>
<td>Criminal Justice Management Concepts</td>
<td>3</td>
</tr>
<tr>
<td>CJFS 3719</td>
<td>Criminal Law</td>
<td>3</td>
</tr>
<tr>
<td>CJFS 3735</td>
<td>Crime and Delinquency</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Semester Hours 24

2. The hours limit may be increased to 12 credits if MATH 1300 is taken.

The legal processes track is designed for students preparing for law school, court administration, paralegal work or legal research positions. Courses required:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CJFS 3720</td>
<td>Legal Research</td>
<td>3</td>
</tr>
<tr>
<td>CJFS 3721</td>
<td>Evidence</td>
<td>3</td>
</tr>
<tr>
<td>CJFS 5825</td>
<td>Criminal Procedures and Constitutional Issues</td>
<td>3</td>
</tr>
<tr>
<td>CJFS 4890</td>
<td>Judicial Administration</td>
<td>3</td>
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</tbody>
</table>

Total Semester Hours 12

A grade of C or better must be received in each required Criminal Justice and Forensic Sciences course in order to satisfy the departmental requirements for the degree.

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
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<tbody>
<tr>
<td>YSU 1500</td>
<td>Success Seminar</td>
<td>1-2</td>
</tr>
<tr>
<td>or SS 1500</td>
<td>Strong Start Success Seminar</td>
<td>1-2</td>
</tr>
<tr>
<td>or HONR 1500</td>
<td>Intro to Honors</td>
<td>1-2</td>
</tr>
</tbody>
</table>

General Education Requirements

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 1550</td>
<td>Writing 1</td>
<td>3-4</td>
</tr>
<tr>
<td>or ENGL 1549</td>
<td>Writing 1 with Support</td>
<td>3-4</td>
</tr>
<tr>
<td>ENGL 1551</td>
<td>Writing 2</td>
<td>3</td>
</tr>
<tr>
<td>CMST 1545</td>
<td>Communication Foundations</td>
<td>3</td>
</tr>
<tr>
<td>Any GER MATH course</td>
<td>3-4</td>
<td></td>
</tr>
<tr>
<td>Arts and Humanities (2 courses)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHIL 2625</td>
<td>Introduction to Professional Ethics (required for major)</td>
<td>3</td>
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</tbody>
</table>

One additional Arts and Humanities course 3

Natural Science (2 classes, 1 with lab) 6-7

Social Science (2 courses)

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
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</thead>
<tbody>
<tr>
<td>CJFS 1500</td>
<td>Introduction to Criminal Justice</td>
<td>3</td>
</tr>
<tr>
<td>SOC 1500</td>
<td>Introduction to Sociology</td>
<td>3</td>
</tr>
<tr>
<td>Social and Personal Awareness (2 courses)</td>
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<tr>
<td>PSYC 1560</td>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>Personal and Social Awareness elective</td>
<td>3</td>
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</table>

Major Requirements

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CJFS 2601</td>
<td>Policing</td>
<td>3</td>
</tr>
<tr>
<td>CJFS 2602</td>
<td>Criminal Courts</td>
<td>3</td>
</tr>
<tr>
<td>CJFS 2603</td>
<td>Corrections</td>
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<tr>
<td>CJFS 3710</td>
<td>Social Statistics</td>
<td>3</td>
</tr>
<tr>
<td>CJFS 3712</td>
<td>Criminal Justice Research</td>
<td>3</td>
</tr>
<tr>
<td>CJFS 3715</td>
<td>Criminal Justice Management Concepts</td>
<td>3</td>
</tr>
<tr>
<td>CJFS 3719</td>
<td>Criminal Law</td>
<td>3</td>
</tr>
<tr>
<td>CJFS 3735</td>
<td>Crime and Delinquency</td>
<td>3</td>
</tr>
<tr>
<td>CJFS 4800</td>
<td>Senior Seminar</td>
<td>3</td>
</tr>
</tbody>
</table>

Criminal Justice Upper Division Electives, 37XX or higher-12 s.h.

Select 12 s.h. of upper-division 37XX or higher CJFS electives. 12

Electives or (Optional) Minor-must have 29 s.h. total

Select 29 s.h. of Minor or additional electives. 29

Required Legal Processes Track Courses

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CJFS 3720</td>
<td>Legal Research</td>
<td>3</td>
</tr>
<tr>
<td>CJFS 3721</td>
<td>Evidence</td>
<td>3</td>
</tr>
</tbody>
</table>
CJFS 37XX or higher 3
CJFS 5825 Criminal Procedures and Constitutional Issues 3
CJFS 4890 Judicial Administration 3

Total Semester Hours 120-124

1 Capstone course.
2 Alternate option is to complete OPOTA.

Year 1

Fall  
YSU 1500 Success Seminar 1
ENGL 1550 Writing 1 3-4
or ENGL 1549 or Writing 1 with Support 3-4
CJFS 1500 Introduction to Criminal Justice 3
Any GER MATH course (3-4 S.H) 3-4
SOC 1500 Introduction to Sociology 3

Semester Hours 13-15

Spring
ENGL 1551 Writing 2 3
CJFS 2602 Criminal Courts 3
CJFS 2601 Policing 3
PSYC 1560 General Psychology 3
Natural Science Elective with Lab 4

Semester Hours 16

Year 2

Fall
CMST 1545 Communication Foundations 3
CJFS 2603 Corrections 3
CJFS 3719 Criminal Law 3
CJFS 3700 or higher-Level Elective 3
Arts and Humanities 3

Semester Hours 15

Spring
CJFS 3715 Criminal Justice Management Concepts 3
CJFS 3735 Crime and Delinquency 3
CJFS 3700 or higher-Level Elective 3
PHIL 2625 Introduction to Professional Ethics 3

Semester Hours 15

Year 3

Fall
CJFS 3720 Legal Research 3
CJFS 3710 Social Statistics 3
Social and Personal Awareness 3
Natural Science 3
Social and Personal Awareness 3

Semester Hours 15

Spring
CJFS 5825 Criminal Procedures and Constitutional Issues 3
CJFS 3712 Criminal Justice Research 3
CJFS 3721 Evidence 3
3700 or higher-Level Elective 3
Elective 3

Semester Hours 15

Year 4

Fall
CJFS 4890 Judicial Administration 3

Elective 3
CJFS 3700 or higher-Level Elective 3
Elective 3

Semester Hours 15

Spring
CJFS 3700 or higher-Level Elective 3
CJFS 4800 3
3700 or higher-Level Elective 3
Elective 3
Elective 3

Semester Hours 15

Total Semester Hours 119-121

Learning Outcomes
1. Students can discriminate the influence of the CJ system at the subsystem levels (policing, courts, and corrections)
2. Students can apply CJ theories.
3. Students can analyze legal situations.
4. Students can assess public policy as it relates to the CJ system.

Bachelor of Science in Applied Science in Criminal Justice, Loss Prevention/Assets Protection Track

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- the core requirements:
  
<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
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<tbody>
<tr>
<td>CJFS 1500</td>
<td>Introduction to Criminal Justice</td>
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<tr>
<td>CJFS 2601</td>
<td>Policing</td>
<td>3</td>
</tr>
<tr>
<td>CJFS 2602</td>
<td>Criminal Courts</td>
<td>3</td>
</tr>
<tr>
<td>CJFS 2603</td>
<td>Corrections</td>
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</tr>
<tr>
<td>CJFS 3710</td>
<td>Social Statistics</td>
<td>3</td>
</tr>
<tr>
<td>CJFS 3712</td>
<td>Criminal Justice Research</td>
<td>3</td>
</tr>
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<td>CJFS 3715</td>
<td>Criminal Justice Management Concepts</td>
<td>3</td>
</tr>
<tr>
<td>CJFS 3719</td>
<td>Criminal Law</td>
<td>3</td>
</tr>
<tr>
<td>CJFS 3735</td>
<td>Crime and Delinquency</td>
<td>3</td>
</tr>
<tr>
<td>CJFS 4800</td>
<td>Senior Seminar</td>
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</tbody>
</table>

Total Semester Hours 30

- the courses required in the student’s chosen emphasis area

- 15 hours of CJFS electives not in the emphasis area (as designated on the department’s curriculum sheet).

Securities Studies Track

The security studies track is offered to students preparing for a career in private or homeland security or the protection of assets in corporate, retail, or industrial settings. Choose 15 hours from the courses below:
### Bachelor of Science in Applied Science in Criminal Justice, Loss Prevention/Assets Protection Track

- **COURSE**
- **TITLE**
- **S.H.**
- **CJFS 1510**  
  Survey of Forensic Science  
  3
- **CJFS 3700**  
  Forensic Fire and Explosives Investigation  
  3
- **CJFS 3740**  
  Criminal Justice Information Systems  
  3
- **CJFS 3751**  
  Prevention Strategies  
  3
- **CJFS 4848**  
  Loss Prevention and Assets Protection Administration  
  3
- **CJFS 5840**  
  Critical Incidents and Homeland Security  
  3
- **CJFS 5841**  
  Terrorism and Countersurveillance  
  3

A grade of C or better must be received in each required Criminal Justice and Forensic Sciences course in order to satisfy the departmental requirements for the degree.

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
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<tbody>
<tr>
<td><strong>FIRST YEAR REQUIREMENT - STUDENT SUCCESS</strong></td>
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<tr>
<td>YSU 1500</td>
<td>Success Seminar</td>
<td>1-2</td>
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<tr>
<td>or SS 1500</td>
<td>Strong Start Success Seminar</td>
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</tr>
<tr>
<td>or HONR 1500</td>
<td>Intro to Honors</td>
<td></td>
</tr>
</tbody>
</table>

**General Education Requirements**

- **ENGL 1550**  
  Writing 1  
  3-4
- **or ENGL 1549**  
  Writing 1 with Support  
  3
- **ENGL 1551**  
  Writing 2  
  3
- **CMST 1545**  
  Communication Foundations  
  3
- **Any GER MATH course**  
  3-4
- **PSYC 1560**  
  General Psychology (required for major)  
  3
- **SOC 1500**  
  Introduction to Sociology (required for major)  
  3
- **PHIL 2625**  
  Introduction to Professional Ethics (required for major)  
  3
- **or PHIL 2627**  
  Law and Criminal Justice Ethics  
  3
- **Arts and Humanities (1 course)**  
  3
- **Social and Personal Awareness (2 courses)**  
  6
- **Natural Science (2 course; 1 with lab)**  
  6-7

**Major Requirements**

- **CJFS 1500**  
  Introduction to Criminal Justice  
  3
- **CJFS 2601**  
  Policing  
  3
- **CJFS 2602**  
  Criminal Courts  
  3
- **CJFS 2603**  
  Corrections  
  3
- **CJFS 3710**  
  Social Statistics  
  3
- **CJFS 3712**  
  Criminal Justice Research  
  3
- **CJFS 3715**  
  Criminal Justice Management Concepts  
  3
- **CJFS 3719**  
  Criminal Law  
  3
- **CJFS 3735**  
  Crime and Delinquency  
  3
- **CJFS 4800**  
  Senior Seminar  
  1

**Securities Studies (Select 15 hours from courses below)**

- **CJFS 1510**  
  Survey of Forensic Science  
  3
- **CJFS 3700**  
  Forensic Fire and Explosives Investigation  
  3
- **CJFS 3740**  
  Criminal Justice Information Systems  
  3
- **CJFS 3751**  
  Prevention Strategies  
  3
- **CJFS 4848**  
  Loss Prevention and Assets Protection Administration  
  3
- **CJFS 5840**  
  Critical Incidents and Homeland Security  
  3
- **CJFS 5841**  
  Terrorism and Countersurveillance  
  3

**Criminal Justice Upper Division Electives**

- Select 12 s.h. of upper-division 37XX or higher CJFS electives.  
  12
- Electives needed to meet 120 s.h. Students may choose a minor.  
  26

**Total Semester Hours**  
**120-124**

1. Capstone course.
2. Alternate option is to complete OPOTA.

**Year 1**

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course(s)</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td><strong>ENGL 1550 or ENGL 1549</strong> or <strong>Writing 1 or Writing 1 with Support</strong></td>
<td>3-4</td>
</tr>
<tr>
<td></td>
<td><strong>CJFS 1500</strong> Introduction to Criminal Justice</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Any GER MATH course</strong> (3-4 S.H)</td>
<td>3-4</td>
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<tr>
<td></td>
<td><strong>SOC 1500</strong> Introduction to Sociology</td>
<td>3</td>
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<tr>
<td></td>
<td><strong>HAHS 1500</strong> Strong Start FYE</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td><strong>Semester Hours</strong></td>
<td>14-16</td>
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</table>

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course(s)</th>
<th>S.H.</th>
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</thead>
<tbody>
<tr>
<td><strong>Spring</strong></td>
<td><strong>ENGL 1551</strong> Writing 2</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>CJFS 2602</strong> Criminal Courts</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>CJFS 2601</strong> Policing</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Natural Science Elective with Lab</strong></td>
<td>4</td>
</tr>
<tr>
<td></td>
<td><strong>PSYC 1560</strong> General Psychology</td>
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<td><strong>Semester Hours</strong></td>
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</table>

**Year 2**

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course(s)</th>
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<tbody>
<tr>
<td><strong>Fall</strong></td>
<td><strong>CMST 1545</strong> Communication Foundations</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>CJFS 2603</strong> Corrections</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>CJFS 3719</strong> Criminal Law</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>CJFS 3700 or higher-Level Elective</strong></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Arts and Humanities</strong></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Semester Hours</strong></td>
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</tbody>
</table>

**Year 3**

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course(s)</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td><strong>CJFS 3715</strong> Criminal Justice Management Concepts</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>CJFS 3735</strong> Crime and Delinquency</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>CJFS 3700 or higher-Level Elective</strong></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>PHIL 2625</strong> Introduction to Professional Ethics</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Semester Hours</strong></td>
<td>15</td>
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</tbody>
</table>

**Year 4**

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course(s)</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td><strong>CJFS 3712</strong> Criminal Justice Research</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>CJFS 3740</strong> Criminal Justice Information Systems</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Social and Personal Awareness</strong></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>CJFS 3700 or higher-Level Elective</strong></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Elective</strong></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Semester Hours</strong></td>
<td>15</td>
</tr>
</tbody>
</table>

**Electives needed to meet 120 s.h. Students may choose a minor.**
Learning Outcomes
1. Students can discriminate the influence of the CJ system at the subsystem levels (policing, courts, and corrections)
2. Students can apply CJ theories.
3. Students can analyze legal situations.
4. Students can assess public policy as it relates to the CJ system.

Certificate in Basic Peace Officer Training

The certificate program in basic police officer training is considered appropriate for persons who are beginning a career in law enforcement. This certificate is considered a starting point in the new officer’s education. The certificate serves as an incentive to continue toward an associate or baccalaureate degree. All of the courses needed for the certificate are applicable for advanced degrees. A placement test is required for all English courses.

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CJFS 1500</td>
<td>Introduction to Criminal Justice</td>
<td>3</td>
</tr>
<tr>
<td>CJFS 2601</td>
<td>Policing</td>
<td>3</td>
</tr>
<tr>
<td>CJFS 3777</td>
<td>Ohio Peace Officer Basic Training</td>
<td>16</td>
</tr>
<tr>
<td>ENGL 1550</td>
<td>Writing 1</td>
<td>3</td>
</tr>
<tr>
<td>SOC 1500</td>
<td>Introduction to Sociology</td>
<td></td>
</tr>
<tr>
<td>PHIL 1560</td>
<td>Introduction to Philosophy</td>
<td></td>
</tr>
<tr>
<td>AHLT 1502</td>
<td>Applied Pathophysiology</td>
<td></td>
</tr>
<tr>
<td>CJFS 2602</td>
<td>Criminal Courts</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Select one of the following:</td>
<td>3-4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Learning Outcomes
1. Students will identify the key aspects to the elements of law.

Certificate in Homeland Security

The Certificate in Homeland Security requires a minimum of 12 semester hours. The courses are listed as AHLT, CJFS, PHLT, and PLA. Courses are open to any undergraduate student or graduate student meeting program and course prerequisites. Whether a course can be used to fulfill major requirements will be determined by department in which the student is a major, and students may be required to take courses outside the student’s major program of study as university electives to complete the certificate. This certificate can be earned in one or two semesters based on the availability of courses assuming the student is taking at least 12 credits per semester.

Transfer students must complete a minimum of 6 hours in residence.

Undergraduate students must earn 12 credits as from the list below. Graduate students are limited to courses at the 5800-level or above and are not eligible for PLA.

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>AHLT 5807</td>
<td>Epidemiology</td>
<td>3</td>
</tr>
<tr>
<td>CJFS 3700</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>CJFS 5840</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>CJFS 5841</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>PHLT 5810</td>
<td>Agents of Mass Casualty</td>
<td>3</td>
</tr>
<tr>
<td>PHLT 5812</td>
<td>Crisis Management in Public Health</td>
<td>3</td>
</tr>
<tr>
<td>PLA 3700</td>
<td>Prior Learning Assessment Upper Division Credit</td>
<td>3</td>
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</table>

Select THREE of the following: 9

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
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<tbody>
<tr>
<td>CJFS 4850D</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CJFS 5841</td>
<td>Terrorism and Countersurveillance</td>
<td></td>
</tr>
<tr>
<td>CJFS 4851</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CJFS 5875</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SOC 3744</td>
<td>Social Deviance</td>
<td></td>
</tr>
<tr>
<td>PSYC 3702</td>
<td>Abnormal Psychology</td>
<td></td>
</tr>
<tr>
<td>CJFS 3752</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SOC 3733</td>
<td>White Collar Crime</td>
<td></td>
</tr>
<tr>
<td>CJFS 3702</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CJFS 3702L</td>
<td>Correctional Strategies Laboratory</td>
<td></td>
</tr>
<tr>
<td>SOC 3761</td>
<td>Elder Crimes - Elder Justice</td>
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</tr>
</tbody>
</table>

Total Semester Hours 18

Minor in Criminal Justice - Corrections

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CJFS 1500</td>
<td>Introduction to Criminal Justice</td>
<td>3</td>
</tr>
<tr>
<td>CJFS 2603</td>
<td>Corrections</td>
<td>3</td>
</tr>
<tr>
<td>CJFS 3702</td>
<td>Correctional Strategies</td>
<td>6</td>
</tr>
<tr>
<td>PL 3702L</td>
<td>Correctional Strategies Laboratory</td>
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</tr>
<tr>
<td>CJFS 4803</td>
<td>Correctional Case Management and Treatment</td>
<td>3</td>
</tr>
<tr>
<td>CJFS 5802</td>
<td>Corrections Law and Liability</td>
<td>3</td>
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</tbody>
</table>

Total Semester Hours 18
### Minor in Criminal Justice Ethics

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CJFS 1500</td>
<td>Introduction to Criminal Justice</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 2627</td>
<td>Law and Criminal Justice Ethics</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 3708</td>
<td>Social and Political Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 3711</td>
<td>General Ethics</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 3723</td>
<td>Philosophy of Law</td>
<td>3</td>
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<tr>
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<td>Select one of the following:</td>
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<tr>
<td>PHIL 1561</td>
<td>Technology and Human Values</td>
<td>3</td>
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<tr>
<td>PHIL 1565</td>
<td>Critical Thinking</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 2635</td>
<td>Ethics of War and Peace</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 4820</td>
<td>Seminar in Philosophy (relevant topic and instructor consent only)</td>
<td>3</td>
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<tr>
<td>PHIL 4870</td>
<td>Internship in Ethical Practice (1 s.h., must repeat 3 times)</td>
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Total Semester Hours: 18

### Minor in Criminal Justice System

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CJFS 1500</td>
<td>Introduction to Criminal Justice</td>
<td>3</td>
</tr>
<tr>
<td>CJFS 2601</td>
<td>Policing</td>
<td>3</td>
</tr>
<tr>
<td>CJFS 2602</td>
<td>Criminal Courts</td>
<td>3</td>
</tr>
<tr>
<td>CJFS 2603</td>
<td>Corrections</td>
<td>3</td>
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<tr>
<td></td>
<td>Select 6 s.h. of upper-division Criminal Justice courses.</td>
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Total Semester Hours: 18

### Minor in Criminal/Legal Processes

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
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</tr>
</thead>
<tbody>
<tr>
<td>CJFS 1500</td>
<td>Introduction to Criminal Justice</td>
<td>3</td>
</tr>
<tr>
<td>CJFS 2602</td>
<td>Criminal Courts</td>
<td>3</td>
</tr>
<tr>
<td>CJFS 3719</td>
<td>Criminal Law</td>
<td>3</td>
</tr>
<tr>
<td>CJFS 3720</td>
<td>Legal Research</td>
<td>3</td>
</tr>
<tr>
<td>CJFS 3721</td>
<td>Evidence</td>
<td>3</td>
</tr>
<tr>
<td>CJFS 5825</td>
<td>Criminal Procedures and Constitutional Issues</td>
<td>3</td>
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Total Semester Hours: 18

### Minor in Juvenile Justice System

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
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</thead>
<tbody>
<tr>
<td>CJFS 1500</td>
<td>Introduction to Criminal Justice</td>
<td>3</td>
</tr>
<tr>
<td>CJFS 2603</td>
<td>Corrections</td>
<td>3</td>
</tr>
<tr>
<td>CJFS 3702</td>
<td>Correctional Strategies</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>&amp; 3702L Correctional Strategies Laboratory</td>
<td>6</td>
</tr>
<tr>
<td>CJFS 3735/SOC 2630/3735</td>
<td>Crime and Delinquency ¹</td>
<td>3</td>
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<tr>
<td>CJFS 3736</td>
<td>Criminal Victimization</td>
<td>3</td>
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<tr>
<td>CJFS 5875</td>
<td>Juvenile Justice System</td>
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</table>

Total Semester Hours: 21

¹ SOC 2630 Criminology or SOC 3735 Juvenile Delinquency may be substituted for CJFS 3735 Crime and Delinquency.

### Minor in Criminal Justice Ethics

<table>
<thead>
<tr>
<th>COURSE</th>
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<tbody>
<tr>
<td>CJFS 1500</td>
<td>Introduction to Criminal Justice</td>
<td>3</td>
</tr>
<tr>
<td>CJFS 1510</td>
<td>Survey of Forensic Science</td>
<td>3</td>
</tr>
<tr>
<td>CJFS 2601</td>
<td>Policing</td>
<td>3</td>
</tr>
<tr>
<td>CJFS 3714</td>
<td>Forensic Science: Crime Scene Investigation</td>
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<td>&amp; 3714L Forensic Science: Crime Scene Investigation Laboratory</td>
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<tr>
<td>CJFS 3715</td>
<td>Criminal Justice Management Concepts</td>
<td>3</td>
</tr>
<tr>
<td>CJFS 3765</td>
<td>Human Relations</td>
<td>3</td>
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<tr>
<td>CJFS 5825</td>
<td>Criminal Procedures and Constitutional Issues</td>
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Total Semester Hours: 21

### Minor in Loss Prevention and Assets Protection

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
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</tr>
</thead>
<tbody>
<tr>
<td>CJFS 1500</td>
<td>Introduction to Criminal Justice</td>
<td>3</td>
</tr>
<tr>
<td>CJFS 2602</td>
<td>Criminal Courts</td>
<td>3</td>
</tr>
<tr>
<td>CJFS 3700</td>
<td>Forensic Fire and Explosives Investigation</td>
<td>3</td>
</tr>
<tr>
<td>CJFS 3715</td>
<td>Criminal Justice Management Concepts</td>
<td>3</td>
</tr>
<tr>
<td>CJFS 3740</td>
<td>Criminal Justice Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>CJFS 3751</td>
<td>Prevention Strategies</td>
<td>3</td>
</tr>
<tr>
<td>CJFS 4848</td>
<td>Loss Prevention and Assets Protection Administration</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Semester Hours: 24

### Bachelor of Science in Applied Science in Merchandising: Fashion and Interiors

**Coordinator**
Dr. Priscilla Gitimu, Ph.D.
Room: 3524 Cushwa Hall
Phone: 330-941-1822
Email: pgitimu@ysu.edu

**Mission Statement of the Merchandising: Fashion & Interiors program**

The Merchandising: Fashion and Interiors major prepares students for a broad range of careers related to the fashion and interiors industries. The program exposes students to an interdisciplinary and a global perspective to the business side of fashion apparel and home fashion industries. The students acquire a Bachelors of Applied Science degree which is designed to provide the skills and knowledge for apparel and home goods industries, these skills include: merchandising, retailing, distribution, computer applications in textiles and apparel, product development and appraisal skills. Students choose to do more of fashion or more of interior courses depending on their career aspirations. The program exposes students to rigorous course work in fashion and interiors courses. Students also complete courses in marketing, management, human ecology, and other support courses. The program serves undergraduates who aspire to be professionals in the fashion apparel industry and interior industry. Graduates find employment mostly in retailing of apparel, furnishings, accessories and personal care products.

**What is Merchandising?**

Merchandising is a specialized management function within the fashion, textiles and home interiors industries. Merchandisers are responsible for selection of materials, collaborating with the production team and meeting market requirements. The job demands knowledge of fashion trends,
textures, materials and colors on one hand and understanding of market demand and the production processes on the other. Individuals who are assertive, flexible, and resourceful, who like to work with people, and who can assume responsibility, make quick decisions, and think clearly have the traits necessary for successful careers in fashion merchandising.

Internship requirements
Merchandising students must complete at least 3 semester hours of internship credit.

Minor
- Merchandising majors often select minors in Marketing, Management, Journalism, Communications, Art, or Photography. A minor should be selected from an area of personal or career interest.
- There is a minor in fashion for students who have some interest in fashion. A fashion minor is a great complement to numerous career fields because fashion clothing serves a basic human need.

FIT - Fashion Institute of Technology - Visiting Student program
The YSU Merchandising program has an articulation agreement with the Fashion Institute of Technology (FIT) in New York. Interested students can attend FIT for one academic year after completing 30 hours of GER credits at YSU and have 3.00 GPA. Participating students then come back to YSU to complete YSU residency requirement in the MRCH program and will end up with a BSAS MRCH degree from YSU and an Associate from FIT. If you are interested in this program route, please consult very early with Dr. Priscilla Gitimu, the FIT liaison at YSU.

Career Opportunities
Graduates can pursue careers as:
- Buyers
- Department managers
- Merchandise managers
- Store managers
- Store owners
- Sales representatives
- Sales managers
- Merchandisers
- Merchandise allocators
- Merchandise planners
- Merchandise analysts
- Marketing directors
- Fashion directors
- Wardrobe consultants
- Personal Shoppers

Check the Dictionary of Occupational Titles under section 141 for additional related careers.

Potential Employment Settings
- Retail Department and Specialty Stores
- Apparel manufacturers
- Advertising agencies
- Apparel design studios and workrooms
- Textile and Findings manufacturers
- Fashion forecasting firms
- Retail business and apparel
- Industry publications

### COURSE   TITLE   S.H.
FIRST YEAR REQUIREMENT - STUDENT SUCCESS
YSU 1500  Success Seminar  1-2

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
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<tbody>
<tr>
<td>ENGL 1550</td>
<td>Writing 1</td>
<td>3-4</td>
</tr>
<tr>
<td>ENGL 1551</td>
<td>Writing 2</td>
<td>3</td>
</tr>
<tr>
<td>CMST 1545</td>
<td>Communication Foundations</td>
<td>3</td>
</tr>
<tr>
<td>MATH 2623</td>
<td>Quantitative Reasoning</td>
<td>3</td>
</tr>
<tr>
<td>ART 1540</td>
<td>Masterpieces of World Art</td>
<td>3</td>
</tr>
<tr>
<td>or ART 1541</td>
<td>Survey of Art History 1</td>
<td>3</td>
</tr>
<tr>
<td>or ART 1542</td>
<td>Survey of Art History 2</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 2625</td>
<td>Introduction to Professional Ethics</td>
<td>3</td>
</tr>
<tr>
<td>or PHIL 2628</td>
<td>Business Ethics</td>
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</tr>
<tr>
<td>CHEM 1500 &amp; 1500L</td>
<td>Chemistry in Modern Living and Chemistry in Modern Living Laboratory</td>
<td>3</td>
</tr>
<tr>
<td>or CHEM 1505/1505L</td>
<td>Allied Health Chemistry 1</td>
<td>3</td>
</tr>
<tr>
<td>or CHEM 1515/1515L</td>
<td>General Chemistry 1</td>
<td>3</td>
</tr>
<tr>
<td>SOC 1500</td>
<td>Introduction to Sociology</td>
<td>3</td>
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<tr>
<td>PSYC 1560</td>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>ECON 2610</td>
<td>Principles 1: Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>Social and Personal Awareness (2 courses)</td>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>

### Major Required Courses (34 s.h.):
- HMEC 1550  Human Ecology Professions  1
- MRCH 1506  Clothing and Image Development  3
- MRCH 2625  The World of Fashion  3
- MRCH 3705  Fashion Textiles  3
- MRCH 3713  Merchandise Buying  3
- MRCH 3740L  Computer Applications for Textiles & Apparel Lab  3
- MRCH 3760  Visual Merchandising  3
- MRCH 3745  Product Line Development  3
- MRCH 4870  Global Fashion Economy  3
- MRCH 4877  History of Fashion  3
- MRCH 4880  Merchandising Management  3
- HMEC 4836  Internship  3

Select one of the two courses (3 s.h.):
- MRCH 3730  Social Psychology of Clothing and Appearance  3
- MRCH 3764  Family Housing and Technology  3

Select two of the following lower-division courses (6 s.h.):
- MRCH 1508  Apparel Production  3
- MRCH 1510  Apparel Evaluation  3
- MRCH 2661  Fundamentals of Interior Design  3
- MRCH 2663  Materials and Methods  3

Select two courses of the following upper-division courses (6 s.h.):
- MRCH 3715  Fashion Promotion and Fashion Show Production  3
- MRCH 3795  Fashion Industry Tour  3
- MRCH 4879  History of Furnishings and Interiors  3
- HMEC 5895  International Studies in Human Ecology  1-4
- HMEC 4875  Directed Individual Study  1-3

### Required Additional Courses 1
- FNUT 1543  Personal Nutrition  1
- CSIS 1514  Business Computer Systems  3
- MGT 2604  Legal Environment of Business  1
- CHFM 3731  Individual and Family Development  3
- MGT 3725  Fundamentals of Management  3
- MKTG 3703  Marketing Concepts and Practice  3
### Associate of Applied Science in Hospitality Management, Event Management Track

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<td>SOC 1500</td>
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<td>MRCH 3713</td>
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<td>Computer Applications for Textiles &amp; Apparel Lab</td>
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### Learning Outcomes
At the completion of the Merchandising: Fashion and Interiors program, graduates will be able to:

- Generate effective solutions to problems in manufacturing and marketing.
- Interpret the needs and wants of target customers.
- Develop a financially sound product line.
- Integrate and apply merchandising principles in workplace settings.
- Evaluate product quality and serviceability.

### Associate of Applied Science in Hospitality Management, Event Management Track

Mark J. Zetts, MBA  
AAS- Hospitality Management Program Director  
(330) 941-1784  
mjzetts01@ysu.edu

Students may earn an associate degree and/or a bachelor's degree with a major in hospitality management. The hospitality management programs provide students with the knowledge and skills needed to be successful and competent in this fast-growing field, not only in the United States but throughout the world.

The Associate of Applied Science degree articulates with the bachelor's degree. The Bachelor of Science in Applied Science program exposes students to advanced management concepts in lodging, food and beverage, or event management.

The Event Management track provides coursework to prepare graduates to plan leisure activities, sporting events and other celebrations from arranging food and entertainment to reserving venues and accommodations for guests.
The Restaurant and Foodservice track prepares graduates for managing
restaurant or institutional food service operations.

The Hotel and Lodging track prepares graduates for careers in the
lodging area of hospitality - cruise ships, resorts and hotels.

For more information, contact Mr. Mark Zetts at mjzetts01@ysu.edu or (330)
941-1784

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<td>MATH 2623</td>
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<td>HAHS 1500</td>
<td>Strong Start FYE</td>
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<td>ENGL 1550</td>
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<td>CSIS 1514</td>
<td>Business Computer Systems</td>
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<td>Must have C or better; courses cannot be taken Credit/No Credit</td>
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<tr>
<td>HMEC 1550 Human Ecology Professions</td>
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<tr>
<td>HMGT 1500 Introduction to Hospitality Industry</td>
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<tr>
<td>FNUT 1512 Food Safety and Sanitation</td>
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<tr>
<td>FNUT 1551 Normal Nutrition</td>
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<td>FNUT 1553 Food Science and Management Principles</td>
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<td>&amp; 1553L Food Science and Management Principles Laboratory</td>
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<td>HMGT 2603 Hospitality Managerial Accounting 1</td>
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<td>HMGT 2691 Hospitality Cooperative Work Experience (Permit required, see advisor. Student must sign up for permit prior to registration.)</td>
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<tr>
<td>HMGT 3719 Facilities Management</td>
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<tr>
<td>HMGT 3745 Hospitality Marketing and Sales</td>
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<tr>
<td>FNUT 2612 Food Systems: Operation, Production, and Service</td>
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<td>&amp; 2612L Food Systems: Operations, Production, and Service Laboratory</td>
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<td>HMGT 4846 Event Management</td>
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<td>60 s.h. required for the degree - select elective(s)</td>
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Some courses are offered only once a year; see your advisor for proper prerequisites and sequence of courses. This curriculum articulates perfectly with the Bachelor of Science program in Applied Science in Hospitality Management. Some alternative coursework, including ACCT, MGT, and MKTG courses, may be taken in the Williamson College of Business Administration where a minimum GPA of 2.5 is required.

Learning Outcomes

At the completion of the hospitality management program, graduates will be able to:

- Demonstrate appropriate customer and guest service practices, skills and behaviors required during customer involvement that contribute to customer satisfaction.
- Demonstrate the knowledge of fundamental principles of leadership and the ability to work with a group of people to formulate rational solutions to hospitality operational problems.
- Demonstrate quality food preparation and presentation skills, using appropriate health, safety, sanitation, and environmental protection procedures in hospitality.
- Demonstrate the use and knowledge of current technologies in the hospitality industry. Explain key factors in the design, development, and maintenance of the industry facilities and apply relevant technologies in ways that enhance organizational performance.
- Demonstrate the ability to market hospitality goods and services effectively and responsibly.
- Analyze legal, ethical, and socio-political considerations affecting organizations to make management decisions.
- Demonstrate use of accepted accounting practice and sound financial management.
Associate of Applied Science in Hospitality Management, Hotel and Lodging Management Track

Mark J. Zetts, MBA
AAS- Hospitality Management Program Director
330-941-1784
mjzetts01@ysu.edu

Students may earn an associate degree and/or a bachelor's degree with a major in hospitality management. The hospitality management programs provide students with the knowledge and skills needed to be successful and competent in this fast-growing field, not only in the United States but throughout the world.

The Associate of Applied Science degree articulates with the bachelor's degree. The Bachelor of Science in Applied Science program exposes students to advanced management concepts in lodging, food and beverage, or event management.

The Hotel and Lodging track provides coursework to prepare graduates to manage all aspects of providing accommodations and lodging services for guests.

Learning Outcomes
At the completion of the hospitality management program, graduates will be able to:

- Demonstrate appropriate customer and guest service practices, skills and behaviors required during customer involvement that contribute to customer satisfaction.
- Demonstrate the knowledge of fundamental principles of leadership and the ability to work with a group of people to formulate rational solutions to hospitality operational problems.
- Demonstrate quality food preparation and presentation skills, using appropriate health, safety, sanitation and environmental protection procedures in hospitality.
- Demonstrate the use and knowledge of current technologies in the hospitality industry. Explain key factors in the design, development and maintenance of the industry facilities and apply relevant technologies in ways that enhance organizational performance.
- Demonstrate the ability to market hospitality goods and services effectively and responsibly.
- Analyze legal, ethical, and socio-political considerations affecting organizations to make management decisions.
- Demonstrate use of accepted accounting practice and sound financial management.

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<td>YSU 1500</td>
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<td>or HONR 1500</td>
<td>Intro to Honors</td>
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General Education Requirements

| ENGL 1550 | Writing 1 | 3-4 |
| or ENGL 1549 | Writing 1 with Support |
| ENGL 1551 | Writing 2 | 3 |
| CMST 1545 | Communication Foundations | 3 |
| MATH 2623 | Quantitative Reasoning | 3 |
| Select 2 courses from 2 domains: Natural Sciences (one must include a lab), Social Science, A&H | 6 |

| CSIS 1514 | Business Computer Systems |
| Major Requirements |
| Must have C or better; courses cannot be taken Credit/No Credit |
| HMEC 1550 | Human Ecology Professions |
| HMGT 1500 | Introduction to Hospitality Industry |
| FNUT 1512 | Food Safety and Sanitation |
| FNUT 1551 | Normal Nutrition |
| FNUT 1553 & 1553L | Food Science and Management Principles and Food Science and Management Principles Laboratory |
| FNUT 2610 | Organization and Management |
| HMGT 2603 | Hospitality Managerial Accounting 1 |
| HMGT 2691 | Hospitality Cooperative Work Experience (Permit required, see advisor. Student must sign up for permit prior to registration.) |
| HMGT 3719 | Facilities Management |
| HMGT 3745 | Hospitality Marketing and Sales |

Hotel and Lodging Management

| HMGT 2622 | Hotel Management |
| HMGT 3734 | Front Office Operation |
| Electives | 2 |

Total Semester Hours: 60-62

Some courses offered only once a year; see your advisor for proper prerequisites and sequence of courses. This curriculum articulates perfectly with the Bachelor of Science program in Applied Science in hospitality management. See your advisor regarding prerequisites for ACCT, MGT, and MKTG courses.

Year 1

| Semester Hours |
| Fall |
| YSU 1500 | Success Seminar | 1 |
| HMEC 1550 | Human Ecology Professions | 1 |
| HMGT 1500 | Introduction to Hospitality Industry | 3 |
| ENGL 1550 | Writing 1 | 3 |
| FNUT 1553 | Food Science and Management Principles | 3 |
| FNUT 1553L | Food Science and Management Principles Laboratory | 1 |
| FNUT 1512 | Food Safety and Sanitation | 1 |
| CSIS 1514 | Business Computer Systems | 3 |
| Semester Hours: 16 |

| Spring |
| FNUT 2610 | Organization and Management |
| or MGT 3725 | Organization and Management |
| ENGL 1551 | Writing 2 | 3 |
| FNUT 1551 | Normal Nutrition (Also counts as SPA elective) | 3 |
| HMGT 2622 | Hotel Management | 3 |
| MATH 2623 | Quantitative Reasoning | 3 |
| Semester Hours: 15 |

Year 2

| Semester Hours |
| Fall |
| HMGT 2603 | Hospitality Managerial Accounting 1 | 4 |
| HMGT 3734 | Front Office Operation | 3 |
| HMGT 3719 | Facilities Management | 4 |
| HMGT 3745 | Hospitality Marketing and Sales | 4 |
| Semester Hours: 15 |

| Spring |
| CMST 1545 | Communication Foundations | 3 |
| HMGT 2691 | Hospitality Cooperative Work Experience | 3 |
Associate of Applied Science in Hospitality Management, Restaurant and Food Service Management Track

Mark J. Zetts, MBA
AAS- Hospitality Management Program Director
(330) 941-1784
mjzetts01@ysu.edu

Students may earn an associate degree and/or a bachelor’s degree with a major in hospitality management. The hospitality management programs provide students with the knowledge and skills needed to be successful and competent in this fast-growing field, not only in the United States but throughout the world.

The Associate of Applied Science degree articulates with the bachelor’s degree. The Bachelor of Science in Applied Science program exposes students to advanced management concepts in lodging, food and beverage, or event management.

The Food Service Management track provides coursework to prepare graduates to plan and implement large and small scale catered events, as well as manage and market restaurant and catering operations.

COURSE TITLE S.H.
FIRST YEAR REQUIREMENT -STUDENT SUCCESS
YSU 1500 Success Seminar 1-2
or SS 1500 Strong Start Success Seminar
or HONR 1500 Intro to Honors

General Education Requirements
ENGL 1550 Writing 1 3-4
or ENGL 1549 Writing 1 with Support
ENGL 1551 Writing 2 3
CMST 1545 Communication Foundations 3
MATH 2623 Quantitative Reasoning 3

Select 2 courses from 2 domains: Natural Sciences (one must include a lab), Social Sciences, A&H

Other Requirements
CSIS 1514 Business Computer Systems 3
FNUT 2610 Organization and Management 3

Major Requirements
Must have C or better; courses cannot be taken Credit/No Credit
HMGT 1500 Introduction to Hospitality Industry 3
FNUT 1512 Food Safety and Sanitation 1
FNUT 1543 Personal Nutrition ([FNUT 1551 counts as a SPA elective]) 1
or FNUT 1551 Normal Nutrition 1
HMEC 1550 Human Ecology Professions 1
FNUT 1553 & 1553L Food Science and Management Principles and Food Science and Management Principles Laboratory 4
HMGT 2603 Hospitality Managerial Accounting 1 4

HMGT 2691 Hospitality Cooperative Work Experience (Permit required, see advisor. Student must sign up for permit prior to registration.) 3
HMGT 3719 Facilities Management 4
HMGT 3745 Hospitality Marketing and Sales 4

Restaurant and Foodservice Management
FNUT 2612 & 2612 L Food Systems: Operation, Production, and Service and Food Systems: Operations, Production, and Service Laboratory 5
HMGT 3725 Food and Beverage Management 3

Electives 2

Some courses offered only once a year; see your advisor for proper prerequisites and sequence of courses. This curriculum articulates perfectly with the Bachelor of Science program in Applied Science in hospitality management. See your advisor regarding prerequisites for ACCT, MGT, and MKTG courses.

Year 1
Fall S.H.
YSU 1500 Success Seminar 1
HMGT 1500 Introduction to Hospitality Industry 3
ENGL 1550 Writing 1 3
HMEC 1550 Human Ecology Professions 1
FNUT 1553 Food Science and Management Principles 3
FNUT 1553L Food Science and Management Principles Laboratory 1
FNUT 1512 Food Safety and Sanitation 1
MATH 2623 Quantitative Reasoning 3

Spring
FNUT 2610 Organization and Management 3
FNUT 1543 Personal Nutrition 3
or FNUT 1551 Normal Nutrition
ENGL 1551 Writing 2 3
FNUT 2612 Food Systems: Operation, Production, and Service 3
FNUT 2612 L Food Systems: Operations, Production, and Service Laboratory 2
CSIS 1514 Business Computer Systems 3

Year 2
Fall
HMGT 2603 Hospitality Managerial Accounting 1 4
HMGT 3719 Facilities Management 4
HMGT 3745 Hospitality Marketing and Sales 4

Spring
CMST 1545 Communication Foundations 3
HMGT 3725 Food and Beverage Management 3
HMGT 2691 Hospitality Cooperative Work Experience 3
Social Science Elective 3

Total Semester Hours 59
# Bachelor of Science in Applied Science in Hospitality Management

(330) 941-3344

The hospitality management program provides students with the knowledge and skills needed to be successful and competent in this fast-growing field, not only in the United States, but globally.

Students may earn an associate degree (AAS - 2 year) and/or a bachelor’s degree (BSAS - 4 year) with a major in Hospitality Management. The Associate of Applied Science degree articulates seamlessly with the baccalaureate degree. The Bachelor of Science in Applied Science program exposes students to advanced management concepts in lodging, food and beverage, or event management.

For more information, visit the Human Ecology Department at Cushwa Hall 3325

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<td>MGT 2601</td>
<td>Principles 1: Microeconomics</td>
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<td>MGT 2603</td>
<td>Principles 2: Macroeconomics</td>
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<td>MGT 2602</td>
<td>Marketing Concepts and Practice</td>
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<tr>
<td>MGT 2605</td>
<td>Fundamentals of Management</td>
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**Major Requirements**

Must earn a C or better, Courses cannot be taken Credit/No Credit

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<td>FNUT 1553</td>
<td>Food Science and Management Principles and Food Science and Management Principles Laboratory</td>
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<td>HMGT 2603</td>
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### Major Requirements - Student Success

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**General Education Requirements**

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<td>MATH 2623</td>
<td>Quantitative Reasoning</td>
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<tr>
<td>PHIL 2625</td>
<td>Introduction to Professional Ethics</td>
<td>3</td>
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**Support Courses**

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<td>Marketing Concepts and Practice</td>
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<tr>
<td>MGT 3725</td>
<td>Fundamentals of Management</td>
<td>3</td>
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</table>

**Semester Hours**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>HMGT 3719</td>
<td>Facilities Management</td>
<td>4</td>
</tr>
<tr>
<td>CHFM 3731</td>
<td>Individual and Family Development</td>
<td>3</td>
</tr>
<tr>
<td>HMGT 3745</td>
<td>Hospitality Marketing and Sales</td>
<td>4</td>
</tr>
<tr>
<td>HMGT 4804</td>
<td>Hospitality Industry Law and Ethics</td>
<td>3</td>
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<tr>
<td>HMEC 4836</td>
<td>Internship</td>
<td>4</td>
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<tr>
<td>HMEC 4890</td>
<td>Communication of Contemporary Issues</td>
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</tr>
<tr>
<td>HMGT 4896</td>
<td>Hospitality Operations Management</td>
<td>3</td>
</tr>
<tr>
<td>Select 6 upper-division electives</td>
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</tbody>
</table>

**Concentration in Human Ecology or Minor**

Select (A) Concentration in Human Ecology courses or (B) a Minor: 19

A. Concentration in Human Ecology

Select 12 s.h. in CHFM, HMGT, FNUT, HMEC or MRCH coursework.

Select 6 s.h. upper-division electives.

B. Minor and Electives to reach 120 hours

**Total Semester Hours**

120-122

### Year 1

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
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<tbody>
<tr>
<td>ENGL 1550</td>
<td>Writing 1</td>
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<tr>
<td>HMGT 1500</td>
<td>Introduction to Hospitality Industry</td>
<td>3</td>
</tr>
<tr>
<td>Social and Personal Awareness Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>FNUT 1553</td>
<td>Food Science and Management Principles Laboratory</td>
<td>4</td>
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<tr>
<td>HMEC 1550</td>
<td>Human Ecology Professions</td>
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</tr>
<tr>
<td>HAHS 1500</td>
<td>Strong Start FYE</td>
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**Semester Hours**

15

### Year 2

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<tr>
<th>COURSE</th>
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<tbody>
<tr>
<td>FNUT 1512</td>
<td>Food Safety and Sanitation</td>
<td>1</td>
</tr>
<tr>
<td>FNUT 2612</td>
<td>Food Systems: Operation, Production, and Service Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>HMGT 2603</td>
<td>Hospitality Managerial Accounting</td>
<td>4</td>
</tr>
<tr>
<td>MGT 2604</td>
<td>Legal Environment of Business</td>
<td>3</td>
</tr>
<tr>
<td>ECON 2610</td>
<td>Principles 1: Microeconomics</td>
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**Semester Hours**

16

### Year 3

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<th>COURSE</th>
<th>TITLE</th>
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<tbody>
<tr>
<td>HMGT 3719</td>
<td>Facilities Management</td>
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<tr>
<td>MKTG 3703</td>
<td>Marketing Concepts and Practice</td>
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**Semester Hours**

16

### Year 4

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
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<tbody>
<tr>
<td>HMEC 1550</td>
<td>Human Ecology Professions</td>
<td>1</td>
</tr>
<tr>
<td>FNUT 1553</td>
<td>Food Science and Management Principles Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>HMGT 2603</td>
<td>Hospitality Managerial Accounting</td>
<td>4</td>
</tr>
<tr>
<td>FNUT 1512</td>
<td>Food Safety and Sanitation</td>
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</tr>
<tr>
<td>FNUT 2612</td>
<td>Food Systems: Operation, Production, and Service Laboratory</td>
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<tr>
<td>HMGT 2622</td>
<td>Hotel Management</td>
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**Semester Hours**

16
MG 3725  Fundamentals of Management  3
HMEC Concentration or Minor Electives  6

Semester Hours  16

Spring
CHFM 3731  Individual and Family Development  3
Arts and Humanities Elective  3
Natural Science Elective  3
HMEC Concentration or Minor Electives  3

Semester Hours  12

Year 4
Fall
HMG 4804  Hospitality Industry Law and Ethics  3
HMG 3745  Hospitality Marketing and Sales  4
HMEC 4890  Communication of Contemporary Issues  3
HMEC Concentration or Minor Electives  6

Semester Hours  16

Spring
HMG 4896  Hospitality Operations Management  3
HMEC 4836  Internship  4
HMEC Concentration or Minor Electives  6

Semester Hours  13

Total Semester Hours  120

Learning Outcomes
At the completion of the hospitality management program, graduates will be able to:

- Demonstrate appropriate customer and guest service practices, skills and behaviors required during customer involvement that contribute to customer satisfaction.
- Demonstrate the knowledge of fundamental principles of leadership and the ability to work with a group of people to formulate rational solutions to hospitality operational problems.
- Demonstrate quality food preparation and presentation skills, using appropriate health, safety, sanitation and environmental protection procedures in hospitality.
- Demonstrate the use and knowledge of current technologies in the hospitality industry. Explain key factors in the design, development and maintenance of the industry facilities and apply relevant technologies in ways that enhance organizational performance.
- Demonstrate the ability to market hospitality goods and services effectively and responsibly.
- Analyze legal, ethical, and socio-political considerations affecting organizations to make management decisions.
- Demonstrate use of accepted accounting practice and sound financial management.

Minor in Fashion
For advising on the Minor in Fashion, please contact Dr. Priscilla Gitimu at pngitimu@ysu.edu

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
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<tbody>
<tr>
<td>MRCH 1506</td>
<td>Clothing and Image Development</td>
<td>3</td>
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<tr>
<td>MRCH 2625</td>
<td>The World of Fashion</td>
<td>3</td>
</tr>
<tr>
<td>Select four of the following:</td>
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<tr>
<td>MRCH 3715</td>
<td>Fashion Promotion and Fashion Show Production</td>
<td>3</td>
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<tr>
<td>MRCH 3740L</td>
<td>Computer Applications for Textiles &amp; Apparel Lab (P)</td>
<td>3</td>
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<tr>
<td>MRCH 3760</td>
<td>Visual Merchandising</td>
<td>3</td>
</tr>
<tr>
<td>MRCH 4877</td>
<td>History of Fashion</td>
<td>3</td>
</tr>
<tr>
<td>MRCH 3730</td>
<td>Social Psychology of Clothing and Appearance (P)</td>
<td>3</td>
</tr>
<tr>
<td>MRCH 3705</td>
<td>Fashion Textiles (P)</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Hours 18

Department of Health Professions
330-941-3327

The department offers certificate, associate, baccalaureate, and master’s degree programs for future members of the health care delivery and public health professions.

General Education Courses
The department offers one course that satisfies general education requirements. KSS 1500 (https://catalog.ysu.edu/search/?P=KSS%201500) Physical Activity Core Concepts may be applied in the Social and Personal Awareness domain. Please note that in order for KSS 1500 (https://catalog.ysu.edu/search/?P=KSS%201500) Physical Activity Core Concepts to count in the SPA domain, students must take any two KSS Activity Classes (https://catalog.ysu.edu/undergraduate/colleges-programs/college-health-human-services/department-human-performance-exercise-science/#coursestext) in addition to KSS 1500 (https://catalog.ysu.edu/search/?P=KSS%201500) Physical Activity Core Concepts. These courses do not have to be taken concurrently.

Associate programs are offered in:
- Emergency Medical Services
- Medical Laboratory Technology

Baccalaureate programs are offered in:
- Allied Health Completion Program
- Dental Hygiene
- Didactic Program in Dietetics
- Exercise Science
- Public Health, Health Education/ Health Promotion Track
- Public Health, Environmental Health Track
- Medical Laboratory Science
- Respiratory Care
- Gerontology
- Long Term Care Administration

Online Undergraduate Degree Programs
- Allied Health (BSAS)
- Public Health (BSAS)

Certificate programs are offered in:
- Emergency Medical Technician (EMT)
- Paramedic
- Health Information Systems
- Polysomnography
- Applied Gerontology

Minors are offered in:
- Minor in Community Health Planning and Evaluation
- Minor in Environmental Health and Safety
- Minor in Public Health
- Minor in Wellness
- Minor in Gerontology
Master’s degree programs are offered in:

- Respiratory Care
- Dietetics Future Model (DFM) – Master’s in Public Health (MPH)
- Gerontology

The master’s degree program in respiratory care is available for licensed respiratory therapists. The master’s in Dietetics Future Model (DFM) program is a hybrid dietetics and public health master’s degree. This program uses a competency-based education model (CBM). The Master of Arts degree has an interdisciplinary focus on social epidemiology and aging. The program differs from the few others of its kind in the state, and it joins only a small number of other programs in the country. For more information regarding the Respiratory Care program, the Dietetics in Public Health, or Gerontology, refer to the graduate catalog.

There is a restriction on the number of students that can be accepted into the following programs since only a limited number of students can be accommodated: Medical laboratory science (medical technology), dental hygiene, and respiratory care. Detailed information on admission criteria and closing dates for applications are available in the Department of Health Professions, the Bitonte College of Health and Human Services Dean’s Office, or the Admissions Office.

**Important Notice**

Fingerprinting, a criminal background check, and drug testing may be required as a condition for working with a variety of sites used by programs offered in this department. Some sites used by programs offered in the department require that a person have no felony convictions and have passed a drug test within the past year. Students unable to meet these site requirements may not be able to complete their degree from the department. If you have questions concerning these requirements, please see an advisor in the department.

For additional information, please visit the Office of Distance Education by e-mail distanceed@ysu.edu or by phone at (330) 941-1516.

Chair
Sara Michaliszyn, Ph.D., Associate Professor, Acting Chair

Professor
Kelly Colwell, Ed.D., Assistant Professor
Tiffany F. Hughes, Ph.D., Associate Professor
Debbie Juruaz, D.D.S., Professor
Diane P. Kandray, Ed.D., Professor
Joseph P. Lyons, Sc.D., Associate Professor
Joan O’Connell-Spalla, M.S., Assistant Professor
Ruth Palich, M.H.H.S., Assistant Professor
Nicolette Powe, Dr.P.H., Assistant Professor
Amanda Roby, M.H.H.S., Assistant Professor
Salvatore Sanders, Ph.D., Professor
Suzanne Smith, M.Ed., Associate Professor
Silvia Stefan, Ed.D., Assistant Professor
Daniel J. Van Dussen, Ph.D., Professor
Mary Yacovone, M.Ed., Professor

Lecturer
Ronald K. Chordas, Ph.D., Lecturer
Ida Fusillo, M.P.H., Senior Lecturer
Susan E. Kearns, M.S.N., Senior Lecturer
Garrett Kellar, EdD., Lecturer

**Associate Programs**

- Emergency Medical Services (p. 368)
- Medical Laboratory Technician (MLT-AAS) (p. 370)

**Baccalaureate Programs**

- Allied Health Baccalaureate - Completion Program (p. 372)
- Dental Hygiene (p. 378)
- Didactic Program in Dietetics (http://catalog.ysu.edu/undergraduate/colleges-programs/college-health-human-services/department-human-ecology/food-nutrition-didactic-program-dietetics/)
- Exercise Science (p. 393)
- Public Health, Health Education/Health Promotion Track (p. 376)
- Public Health, Environmental Health Track (p. 374)
- Medical Laboratory Science (MLS-BSAS) (p. 381)
- Respiratory Care (p. 384)
- Gerontology (p. 398)
- Long Term Care Administration (p. 399)

**Certificates**

- Health Information Systems (p. 390)
- Paramedic (p. 368)
- Polysomnography (p. 385)
- Applied Gerontology (p. 401)

**Minors**

- Minor in Community Health Planning and Evaluation (p. 391)
- Minor in Environmental Health and Safety (p. 391)
- Minor in Public Health (p. 391)
- Minor in Gerontology (http://catalog.ysu.edu/undergraduate/colleges-programs/college-liberal-arts-social-sciences/department-sociology- anthropology-gerontology/gerontology-minor/)

**Allied Health**

AHLT 1500 Introduction to Online Learning in Health Professions 3 s.h.
Prepare students to take online courses including the use of the Blackboard learning environment and orient students to YSU and YSU’s Health Professions programs. Help students acquire basic skills to be successful in online learning and emphasize skills and resources necessary to be successful in their personal, academic and career-related pursuits. In addition, this course will introduce students to topics such as career assessment and how to become a successful health professional in the 21st Century. Should be taken during a student’s first 30 hours at YSU. Listed also as PHLT 1500 and RESC 1500.
Prereq.: PHLT, AHLT or RESC major.

AHLT 1502 Applied Pathophysiology 4 s.h.
Introduction to clinical anatomy, physiology, and pathophysiology with application to acute and chronic illness.
AHLT 3704 Quantitative Methods in Health Sciences 3 s.h.
This course is designed to provide the Health Care Professional with the ability to read and critically evaluate published research results and reports. Also, to become an educated consumer of medical/dental research and apply evidence-based decision making. Critique research results to make judgments regarding the relevance, credibility and usefulness of clinical decision making. Allows for application of research results in the clinical setting.
Prereq.: MATH 2623 or consent of the instructor.

AHLT 3705 Pharmacotherapeutics 3 s.h.
Advanced concepts and integration of various drug interactions as applied to modern drug therapy. Analysis of drug regimens related to a broad spectrum of pathologic conditions.
Prereq.: BIOL 1545 or BIOL 1551 and BIOL 1552, MATC 2605, or permission of instructor.

AHLT 3706 Practice Management for Dental Hygiene 3 s.h.
Management of dental hygiene care including appointment control, developing and maintaining recall systems, and insurance management. Dental marketing problem solving and the business relationship between dental patients and dental hygiene professionals.
Prereq.: DHYG 2628.

AHLT 3707 Clinical Informatics for the Healthcare Provider 3 s.h.
Application of health informatics by the practicing clinician in the clinical setting. Foundational and Structural Interoperability is provided to address the changing health care needs within the United States.
Prereq.: AHLT 3711 or consent of the instructor.

AHLT 3708 Preventive Public Health Care 3 s.h.
Prereq.: BIOL 1545 or BIOL 1551 and BIOL 1552, or permission of instructor.

AHLT 3709 Elements of Urban Environmental Health Practices 3 s.h.
Focus on development and implementation issues of environmental and public health programs necessary for urban and rural communities to meet acceptable public health standards at the local health department level with emphasis on resources and staffing. AHLT 3708, or permission of instructor. Also listed as PHLT 3709.

AHLT 3710 Gerodontology 3 s.h.
In-depth study of geriatrics as it relates to dental hygiene care and specific concerns of the elderly. An extramural experience with a geriatric patient.
Prereq.: DHYG 1513.

AHLT 3711 Health Care Information Systems 3 s.h.
The course is comprehensive analysis of the concepts and applications of medical informatics. Relevant technologies and "real world" skills are presented in the field of Medical Informatics using data and medical software.
Prereq.: AHLT 3704 or consent of instructor.

AHLT 3717 Health Care Policy 3 s.h.
A comprehensive overview of the American healthcare system. Particular attention given to the design and implementation of the Affordable Care Act.
Prereq.: BIOL 1545 or EMS 1501 or MATC 2600 or MLT 1501 or AHLT major or POL 1560 or permission of instructor.

AHLT 3720 EMS Management 3 s.h.
A review of EMS system design, staffing, chain of command, medical education, policies and procedures, record keeping, inter-agency relationships, community resources and involvement, and legal aspects relevant to private and public emergency medical services.
Prereq.: EMS 2614.

AHLT 3721 Pediatric Emergency Care 3 s.h.
A study of the pathophysiology, symptomatology, advanced diagnostic and therapeutic techniques of medical and traumatic emergencies unique to the pediatric patient.
Prereq.: EMS 2640.

AHLT 3740 Pathology of Infectious Diseases 3 s.h.
Pathology, prevention, transmission, and treatment of infectious disease; emphasis on nosocomial, opportunistic, and emerging bacterial, fungal, parasitic, and viral organisms.
Prereq.: BIOL 1545 or BIOL 1551 and BIOL 1552, or permission of instructor.

AHLT 3745 Impact of Medical Records on Healthcare Reimbursement 3 s.h.
This course is designed to provide the Health Care Professional with knowledge of private, group and government insurance submissions, as well as the diagnostic and procedural coding system to manage electronic medical records. A review of ethical and legal requirements will be examined in relation to laws and regulations as they apply to insurance submission and electronic health records as well.
Prereq.: MATC 2602, MATC 2612 or MATC 2600 or approval from instructor.

AHLT 3755 Principles of Occupational Health and Safety 3 s.h.
Contemporary concepts of occupational health and safety as they apply to health-related environments. Includes development of elements needed to implement comprehensive health and safety plans.
Prereq.: AHLT 3708.

AHLT 4801 Special Topics 1-3 s.h.
The directed study and research of a special problem or issue related to the health field. The topic of interest allows the student to participate in the investigation of aspects of administration, education, business, or research as these pertain to the particular health specialty. May be repeated for a total of 6 s.h.
Prereq.: AHLT 5840 or permission of instructor.

AHLT 4804 Stress and the Health Care Professional 3 s.h.
Personal reactions of those involved in health education or the delivery of health care to patients, families, and their health environment. Indicators of stress and coping strategies, organizational systems, communication theory, conflict resolution, problem solving, and burnout.
Prereq.: AHLT 5840 or permission of instructor.

AHLT 4805 Health Education for Allied Health 3 s.h.
University as well as hospital-based programs reviewed in regard to accreditation, clinical vs didactic instruction, use of simulations, and evaluation techniques. Public health education and the role of the Allied Health professional. A major learning unit and/or research project required.
Prereq.: AHLT 5840 or PHLT 3701 or permission of instructor.

AHLT 4806 Research Methods 3 s.h.
Measurement and interpretation of health data and their application in the research process. Research design considerations, data collection methods, and data analysis of health care research projects.
Prereq.: AHLT 3704.

AHLT 4808 Environmental Health Concerns 3 s.h.
Industrial hygiene, hazardous and infections waste, air and quality, and sanitation policies in health care facilities. Pertinent federal, state, and local legislation.
Prereq.: AHLT 3708 or permission of instructor.

AHLT 4810 Management Skills for Health Professionals 3 s.h.
A study of the conceptual framework of supervision in Health Care Organizations with emphasis on managerial skills, formulation of policies, principles of budgeting, performance appraisals, and community relations.
Prereq.: AHLT 5840, AHLT 4805, or permission of instructor.

AHLT 4820 Directed Research 3 s.h.
Individual study of an issue related to the health care field. Students must present research at a faculty and student forum.
Gen Ed: Capstone.
AHLT 4825 Patient Advocacy for the Health Professional  3 s.h.
This course is designed for the health care professional and focuses on basic concepts of patient advocacy in healthcare facilities. Examines the problems in healthcare quality and how advocacy by professionals can ensure that best practices are adopted. An emphasis on conceptual frameworks, debates, and ethical issues within the field are utilized. Patient centered care, patient safety systems, patient involvement and leadership design, delivery and access will be addressed.  
Prereq.: Junior Status, AHLT 3708, or consent of the instructor.

AHLT 4831L Industrial Hygiene Laboratory  1 s.h.
Application of basic concepts of industrial hygiene including anticipation, recognition, and evaluation of environmental and safety hazards as they pertain to the workplace.

AHLT 4835 Health Diversity  1 s.h.
Strategies of communication that enable the student to understand socioeconomic, political, ethnic, and religious diversity in health care.  
Prereq.: AHLT 5840 or permission of instructor.

AHLT 5807 Epidemiology  3 s.h.
A study of the interrelationships of the host, agent, and environment in determining the causation, frequency, and distribution of disease.  
Prereq.: AHLT 3708, AHLT 5840, or permission of instructor.

AHLT 5816 Environmental Regulations  3 s.h.
Structure and function of federal, state, and local agencies responsible for implementing environmental legislation. Emphasis on the duties and authority of different health and environmental agencies and specific legislation dealing with environmental impacts.  
Prereq.: AHLT 3708, AHLT 5807 or permission of instructor.

AHLT 5831 Industrial Hygiene  3 s.h.
Basic concepts of industrial hygiene including anticipation, recognition, and evaluation of environmental and safety hazards as they pertain to the workplace.  
Prereq.: AHLT 3708, AHLT 4808 or permission of instructor.

AHLT 5840 Comparative Health Systems  3 s.h.
Problems and issues facing global health care systems including access to care, financing and rationing of services. A major project is included.  
Prereq.: AHLT 3708 or permission of instructor.

Dental Hygiene

DHYG 1514L Clinical Dental Hygiene Remediation  1 s.h.
This course is designed to improve the dental hygiene student’s clinical skills, and to develop the basic competencies essential for performing invasive dental hygiene procedures. The student’s individual clinical deficiencies will be addressed, along with patient management and time utilization. This course may be repeated one time. Four hours of clinic per week for twelve weeks.  
Prereq.: Unsatisfactory progress in clinical dental hygiene and/or recommendation of the clinic coordinator.

DHYG 2601 Dental Hygiene  1 3 s.h.
An introduction to providing dental hygiene care. Theories and principles of patient assessment, prevention of disease transmission, instrumentation, instrument sharpening, and coronal polishing. Application of risk assessment as it relates to the treatment plan through case studies.  
Prereq.: Admission to the Dental Hygiene Program.

DHYG 2601L Clinical Dental Hygiene  2 s.h.
Preclinical dental hygiene instruction in a simulation laboratory. Introduction of basic dental hygiene procedures and equipment operation. Six hours of lab per week.  
Prereq.: Admission to the Dental Hygiene Program.

DHYG 2602 Dental Hygiene  2 s.h.
Discussion of appropriate preventive dental agents and devices to improve various dental conditions and implementation techniques. Development of individualized patient education instruction and a tobacco cessation program as part of the dental hygiene care plan.  
Prereq.: DHYG 2601.

DHYG 2602L Clinical Dental Hygiene  2 s.h.
Continuation of pre-clinical dental hygiene instruction in the clinical setting. Includes comprehensive patient care planning and implementation techniques. Twelve hours of lab per week.  
Prereq.: DHYG 2601L.

DHYG 2620 Head and Neck Anatomy  2 s.h.
A study of the anatomy of the head and neck, oral structures and tooth morphology.  
Prereq.: Admission to the Dental Hygiene program.

DHYG 2620L Head and Neck Anatomy Lab  1 s.h.
Applied study of the anatomy of the head and neck, oral structures and tooth morphology. Three hours of lab per week.  
Prereq.: Admission to the Dental Hygiene program.

DHYG 2630 Management of Medical/Dental Emergencies  2 s.h.
Instruction in the prevention, recognition, and management of medical emergencies in the dental office. Emphasis on case studies to develop critical thinking and decision-making skills in patient management.  
Prereq.: Admission to the Dental Hygiene Program.

DHYG 2640 Oral Histology  2 s.h.
A study of the tissues of the human body and embryological development.  
Prereq.: DHYG 2620.

DHYG 3703 Dental Hygiene  3 s.h.
Prereq.: DHYG 2602.

DHYG 3703L Clinical Dental Hygiene  3 s.h.
Clinic application of dental hygiene techniques on student partners and clinic patients. Emphasis on applied preventive measures and patient education. Nine hours of clinic per week.  
Prereq.: DHYG 2602L.

DHYG 3704 Dental Hygiene  4 s.h.
Concepts of nutrition science as they relate to the evaluation and education of dental hygiene patients with emphasis on caries risk assessment.  
Prereq.: DHYG 3703.

DHYG 3704L Clinical Dental Hygiene  4 s.h.
Clinical application of dental hygiene techniques. Emphasis on the interpretation of patient assessment and evidence based research to evaluate patients’ oral health and to develop effective treatment plans. Nine hours of clinic per week.  
Prereq.: DHYG 3703L.

DHYG 3750 Oral Pathology  2 s.h.
The cause and nature of disease, together with anatomical, histological and functional changes. Observation and evaluation of the patients’ systemic and oral health status as it relates to treatment planning. Special emphasis is given to oral pathology and case studies.  
Prereq.: DHYG 2640.

DHYG 3760 Dental Radiology  3 s.h.
History and development of radiographs, radiographic theory and techniques, hazardous effects of radiation, and methods of protection. Emphasis on interpretation of normal anatomic structures and pathologic entities; and the use of diagnosis in prevention of dental and related diseases.  
Prereq.: DHYG 2602L.

DHYG 3760L Dental Radiology Lab  1 s.h.
The techniques necessary to expose, develop, and mount dental films with emphasis in radiographic interpretation. Three hours of lab per week.  
Prereq.: DHYG 2602L.

DHYG 3770 Periodontology  3 s.h.
The study of prevention, diagnosis, and treatment of diseases affecting the gingival and supporting structures of the teeth, as well as implant placement and maintenance. Emphasis is on acquisition of knowledge of the histopathology of disease and the biologic basis for periodontal therapy.  
Prereq.: DHYG 2640.
DHYG 3780  Pharmacology  2 s.h.
Importance of pharmacological aspects of those drugs and drug groups with which the dentist and dental hygienist are directly and indirectly concerned. Application of pharmacology in treatment planning.
Prereq.: DHYG 2630.

DHYG 3790  Local Anesthesia and Pain Control for Dental Hygienists  2 s.h.
Instruction in the anatomy, physiology, pharmacology, and administration of local anesthesia and other pain control methods.
Prereq.: DHYG 3703L or permission of the Program Director.

DHYG 3790L  Local Anesthesia and Pain Control Clinic  1 s.h.
Application of the techniques of local anesthetic administration and pain control on anatomical models and clinical partners. Three hours of clinic per week.
Prereq.: DHYG 3703L or permission of the Program Director.

DHYG 4805  Dental Hygiene 5  3 s.h.
The role of the dental hygienist in providing care for special needs patients by recognizing the necessary treatment plan modifications due to physical, mental, medical, and social factors.
Prereq.: DHYG 3704.

DHYG 4805L  Clinical Dental Hygiene 5  4 s.h.
Advanced clinical application of dental hygiene techniques with emphasis on patient management and radiographic assessment resulting in an individualized and comprehensive treatment plan for periodontal patients. Twelve hours of clinic per week.
Prereq.: DHYG 3704L.

DHYG 4806  Dental Hygiene 6  2 s.h.
A study of dental specialties enhancing students' knowledge, and understanding. Indications for referral, specialized instruments, diagnostic tests, and specific oral hygiene instructions will be discussed.
Prereq.: DHYG 4805.

DHYG 4806L  Clinical Dental Hygiene 6  4 s.h.
Continued application of dental hygiene techniques with emphasis on professionalism and competency in private practice. Twelve hours of clinic per week.
Prereq.: DHYG 4805L.

DHYG 4830  Dental Materials  1 s.h.
The sources, physical properties, methods of manufacturing, and uses of various dental materials. Emphasis on the newest products, and interpretation of research supporting product effectiveness.
Prereq.: DHYG 3704L.

DHYG 4830L  Dental Materials Lab  1 s.h.
Clinical application of selected dental materials and four-handed dentistry enhancing the students' understanding of dental procedures. Technical procedures and delegated responsibilities will be completed on manikins, and student partners.
Prereq.: DHYG 3704L.

DHYG 4840  Directed Dental Hygiene Research  3 s.h.
Development of research skills including problem identification, development of a hypothesis, research design, data collection, analysis, and interpretation. Approved dental hygiene topics will be completed as a group under faculty supervision.
Prereq.: AHLT 4806.
Gen Ed: Capstone.

DHYG 4845  Expanded Functions for the Dental Hygienist  3 s.h.
Review of tooth morphology, properties and manipulation of dental restorative material, and techniques and procedures for restoring teeth with amalgam and tooth colored direct restorations. Concepts of four-handed dentistry and knowledge to perform as an Expanded Functions Dental Auxiliary (EFDA).
Prereq.: DHYG 2620, DHYG 2620L and junior standing or consent of instructor.

DHYG 4845L  Expanded Functions for the Dental Hygienist Lab  1 s.h.
Laboratory application of restorative techniques utilizing the principles and skills of restorative four-handed dentistry. Preparation of the dental hygiene student to perform the duties of an expanded function dental auxiliary.
Prereq.: DHYG 2620, DHYG 2620L and junior standing or consent of instructor.
Coreq.: DHYG 4845.

DHYG 4850  Dental Public Health  3 s.h.
An introduction to public health dentistry, a study of the epidemiology of dental disease, writing grant proposals, and implementation of health promotion theories. Preventing and controlling dental disease through organized community efforts is addressed.
Prereq.: DHYG 4805.

DHYG 4850L  Community Clinicals  1 s.h.
Oral health care services provided by senior dental hygiene students at community sites. Culturally competent care to underserved populations is the primary course emphasis. Forty-five hours of community clinical experience throughout the semester.
Prereq.: DHYG 4805L.

DHYG 4855L  Expanded Functions Clinical  2 s.h.
Clinical implementation of expanded functions dental auxiliary skills gained in DHYG 4845L. Planned, evaluated and supervised clinical experience.
Prereq.: DHYG 2620, DHYG 2620L, and DHYG 4845L or consent of instructor.

DHYG 4860  Ethics and Practice Concepts  2 s.h.
The historical, professional, legal, and ethical aspects of dental hygiene. Study of practice management topics relevant to the changing roles of hygienists with emphasis on quality care in a patient centered practice.
Prereq.: DHYG 4805.

**Emergency Medical Services**

EMS 1500  Emergency Medical Technician  4 s.h.
Provides the basic knowledge and skills to be an Emergency Medical Technician. Meets all National Highway and Safety Administration National Emergency Medical Services Education Standards and the State of Ohio Approved Emergency Medical Services Curriculum Standards for the Emergency Medical Technician. Must be taken concurrently with EMS 1500L and EMS 1500C.

EMS 1500C  Emergency Medical Technician Clinical and Field Internship  1 s.h.
Clinical and Field Internship experience necessary to acquire the skills required to be an Emergency Medical Technician. Meets all national and state curriculum standards for the EMT. Must be taken concurrently with EMS 1500 and EMS 1500L. Ten hours per week after week 12.

EMS 1500L  Emergency Medical Technician Laboratory  2 s.h.
Laboratory experience necessary to acquire skills required to be an Emergency Medical Technician. Meets all National Highway and Safety Administration National Standards. Must be taken concurrently with EMS 1500 and EMS 1500C.

EMS 1501  Introduction to Prehospital Medicine  1 s.h.
Introduction to the roles, responsibilities, EMS systems, and medical and legal considerations of the EMS profession.
Prereq.: Admission to the EMS program.

EMS 1502  General Pathophysiology for the Paramedic  3 s.h.
Study of general lifespan development of the body, how pathophysiologic changes affect it. Provides a foundational basis for viewing the body as a system, understanding its functions, anticipated reaction to injury, illness and intervention.
Prereq.: Admission to EMS program or permission of instructor.

EMS 1503  Patient Assessment and Airway Management  3 s.h.
Intensive course designed to prepare the student in the methodology of advanced patient assessment, and the relevance of clinical signs and symptoms identified. Airway anatomy, equipment, procedures as they pertain to advanced airway management.
Prereq.: Admission to EMS program or permission of instructor.
EMS 1504 Principles of Trauma 3 s.h.
Study of traumatic emergencies normally encountered prehospitaly with an emphasis on pathophysiology, etiology, symptomatology, and management. **Prereq.:** Admission to EMS program or permission of Program Director.

EMS 1505 Emergency Medical Techniques 1 Lab 1 s.h.
Includes scheduled emergency traumatic situations and actual patient contact emphasizing physical assessment, patient interviewing, and management techniques. Meets 3 hours per week. Must be taken concurrently with EMS 1501, EMS 1502, EMS 1503, and EMS 1504. **Prereq.:** Admission to the EMS program or special permission of program director.

EMS 1506 Emergency Medical Services Clinical 1 1 s.h.
Clinical experiences in the emergency department and in the operating room allowing the student to work on various skills necessary for the paramedic. Total of 90 clinical hours. Must be taken concurrently with EMS 1503 and EMS 1505. **Prereq.:** Admission to EMS program or permission of instructor.

EMS 1507 Cardiovascular Emergencies 3 s.h.
Intense study of the etiology, pathophysiology, symptomatology, and management principles for cardiovascular emergencies. Includes electrophysiological principles of EKG interpretation. Must be taken concurrently with EMS 1508. **Prereq.:** Admission to EMS program or permission of instructor.

EMS 1508 Cardiovascular Techniques Lab 1 s.h.
Performance of fundamental techniques employed in the management of cardiovascular emergencies. Three hours lab per week. Must be taken concurrently with EMS 1507. **Prereq.:** EMS 1502, EMS 1503, and EMS 1504.

EMS 1512 Medical Conditions and Management Techniques 3 s.h.
Study of pathophysiology, symptomatology, etiology, and management techniques of commonly encountered medical emergencies. Must be taken concurrently with EMS 1513. **Prereq.:** EMS 1502, EMS 1503, EMS 1504.

EMS 1513 Emergency Medical Techniques 2 Lab 1 s.h.
Simulated situations and actual patient contact emphasizing performance of emergency medical techniques utilized to manage common medical emergencies. Must be taken concurrently with EMS 1512. **Prereq.:** EMS 1505.

EMS 1514 Emergency Medical Services Operations 1 s.h.
Introduction to common rescue tools and techniques utilized in basic victim disentanglement and extrication. **Prereq.:** Admission to EMS program or permission of instructor.

EMS 1515 Clinical Experience 2 1 s.h.
Hospital clinical experience to include rotations through the following: Adult emergency department, critical and intensive care units. Total of 95 hours. Must be taken concurrently with EMS 1508 and EMS 1513. **Prereq.:** EMS 1506.

EMS 1516 Prehospital Field Experience 1 1 s.h.
Field experience with an approved advanced life support unit under the direct supervision of a selected paramedic field preceptor. Total of 200 hours. To be taken concurrently with EMS 1507 and EMS 1512. **Prereq.:** EMS 1504.

EMS 2600 Emergency Medical Services Special Populations 3 s.h.
Study of etiology, pathophysiology, symptomatology and management of special needs patients. Includes gynecology, obstetrics, neonatology, pediatrics, geriatrics, behavioral, abuse/assault, infectious and communicable diseases, and chronic care. Must be taken concurrently with EMS 2601. **Prereq.:** EMS 1507 and EMS 1512 or permission of instructor.

EMS 2601 Emergency Medical Techniques 3 Lab 1 s.h.
Techniques necessary to effectively manage conditions in EMS 2600. Three hour lab. Must be taken concurrently with EMS 2600 and EMS 2605. **Prereq.:** Admission to the EMS program or permission by program director.

EMS 2603 Clinical Experience 3 2 s.h.
Preceptor hospital clinical in the adult and pediatric emergency department; obstetrics, labor and delivery; and, psychiatric department. Total of 120 hours of clinical experience. Must be taken concurrently with EMS 2600. **Prereq.:** EMS 1515.

EMS 2604 Prehospital Field Experience 2 1 s.h.
Performance of advanced life support procedures under the direct supervision of a selected paramedic field preceptor. Total of 150 hours. **Prereq.:** EMS 1516.

EMS 2605 Pulmonary Emergencies 3 s.h.
Intense study of the etiology, pathophysiology, symptomatology, and management principles of pulmonary emergencies. Must be taken concurrently with EMS 2601. **Prereq.:** EMS 1507 and EMS 1512.

EMS 2606 EMS Special Certifications 1 s.h.
Provides the Paramedic with certifications beneficial to prehospital care. These certifications are nationally recognized and commonly sought after by paramedics, and desired by employers. Include PALS, PHTLS, NRP, and EMPACT. To be taken concurrently with EMS 2607. **Prereq.:** Admission to EMS program or special permission of instructor.

EMS 2607 EMS Special Certifications Lab 1 s.h.
Focus on skills and competencies required for PALS, PHTLS, NRP. To be taken concurrently with EMS 2606. **Prereq.:** Admission to the EMS program or special permission by the program director.

EMS 2609 Prehospital Field Internship 3 s.h.
Capstone Field Internship experience requiring the paramedic student to perform successfully as a team leader on an advanced life support unit in the prehospital setting. A minimum of 30 team leads is required with an assigned field preceptor. Approximately 22 hours of field internship per week. **Prereq.:** EMS 2604.

EMS 2613 Critical Care Paramedic 3 s.h.
In-depth study of the underlying abnormalities and physiologic disturbances resulting from traumatic injuries and medical illnesses as it relates to emergency medical care. Includes analysis of case studies. Must be taken concurrently with EMS 2614. **Prereq.:** EMS 2609, or permission of instructor.

EMS 2614 Critical Care Paramedic Laboratory 1 s.h.
Designed to prepare the student as a competent care provider in the transport of critical patients by ground or air unit. Topics include 12-leads, IABPs, RSI, lab data, ETCO2 monitoring, and advance pharmacology. Must be taken concurrently with EMS 2613. **Prereq.:** NREMT and permission of instructor.

EMS 2631 Advanced Clinical and Field Internship Experience 2 s.h.
Field internship in a variety of advanced life-support units to expose the student to hospital-based, public third service, private, and fire service EMS. Includes a field component involving wilderness rescue and emergency medicine. Must be taken concurrently with EMS 2613.

**Gerontology**

GERO 1501 Introduction to Gerontology 3 s.h.
Basic introduction to the interdisciplinary study of aging. Includes social, psychological, economic, cultural, health, and policy issues. Discussion of normal vs. abnormal (disease-related) aspects of aging. **Gen Ed:** Social Science.

GERO 3703 Aging and Society 3 s.h.
An interdisciplinary introduction to studies in aging. Examines the impact of population aging and its effect on society at large. Also examines individual aging processes and social significance of aging. Listed also as SOC 3703. **Prereq.:** SOC 1500 or GERO 1501. **Gen Ed:** Social Science, Well Being, Social and Personal Awareness.
GERO 3703H Honors Aging and Society 3 s.h.
An interdisciplinary introduction to studies in aging. Examines the impact of population aging and its effect on society at large. Also examines individual aging processes and social significance of aging. Listed also as SOC 3703.
Prereq.: GERO 1501 or GERO 1501.

GERO 3745 Sociology of Health, Illness, and Healthcare 3 s.h.
Social attitudes toward illness. Cultural and social factors in disease definition of illness, and organization of the health professions and health facilities. Listed also as SOC 3745.
Prereq.: SOC 1500, GERO 1501, or admission to NEOMED-YSU program.

GERO 3755 Theories of Gerontology 3 s.h.
Review and critical analysis of current theories of the social aspects of aging and their use in research. Listed also as SOC 3755.
Prereq.: SOC 1500 or GERO 1501.

GERO 3756 Aging and Ethnicity 3 s.h.
Aging in American subcultures, noting differences in status/role systems, demographic distributions, life styles, methods of dealing with the elderly, and related problems. Listed also as SOC 3756.
Prereq.: SOC 1500 or GERO 1501.

GERO 3757 Aging and Social Policy 3 s.h.
Critical examination of social policies and social systems which affect aging and retirement. Listed also as SOC 3757 and POL 3757.
Prereq.: SOC 1500, GERO 1501, or POL 1560.

GERO 3758 Long-Term Care 3 s.h.
Examines critical issues in long-term care systems, services, and programs. Impacts of social demographic and economic changes on long-term care needs, demands, and supplies. Contemporary trends and future outlooks of long-term care. Listed also as SOC 3758.
Prereq.: SOC 1500 or GERO 1501.

GERO 3759 Physical Change and Aging 3 s.h.
Designed to provide knowledge about physical aspects of human aging and factors that affect physical aging. Students learn about physical changes that occur naturally with advancing age and changes associated with disease or disability (abnormal changes). Behavioral and inherent factors that influence physical aging are discussed with the goal to increase awareness of prevention strategies.
Prereq.: GERO 1501 or SOC 1500.

GERO 3761 Elder Crimes - Elder Justice 3 s.h.
Issues in gerontology and aging that affect law enforcement and the criminal justice system.
Prereq.: GERO 1501 or SOC 1500 or CJFS 1500.
Cross-listed: CJFS 3761 and SOC 3761.

GERO 3790 Aging in Cross-Cultural Perspective 3 s.h.
Examines the phenomenon of aging from cross-cultural perspectives with an emphasis on cultural evolution and its impact upon the roles and cultural values associated with aging and the aged. Listed also as SOC 3790 and ANTH 3790.
Prereq.: GERO 1501 or ANTH 1500, or SOC 1500.

GERO 4804 Family, Health, and Aging 3 s.h.
Examines family and health related aspects of aging. Positive and negative interactions among family members and caregivers, and their impact on mental and physical quality of life of the elderly. Listed also as SOC 4804.
Prereq.: GERO 3703 or SOC 3703.

GERO 4821 Internship in Gerontology 3-15 s.h.
Application of gerontological knowledge in settings such as social agencies, government offices, hospitals, nursing homes, or industry. May be repeated up to 15 s.h., but only a maximum of 6 semester hours can be applied to the gerontology major.
Prereq.: Junior standing, 9 s.h. of Gerontology, and permission of chairperson.

GERO 4850 Research Methods 3 s.h.
An introduction to methods employed in social research. Attention is given to (1) the logic of scientific inquiry and the relationship between theory and methods; (2) the various qualitative and quantitative methods; (3) research design, data collection, organization, analysis, interpretation and application; (4) the social, cultural, political, and ethical context of social research; and (5) computer skills employed in data analysis. Listed also as ANTH 4850 or SOC 4850.
Prereq.: SOC 3701, ANTH 3701.

GERO 4851 Capstone in Gerontology 3 s.h.
A capstone experience for the interdisciplinary study of aging. Students will complete a major research project.
Prereq.: Senior status in Gerontology and SOC 4850.
Gen Ed: Capstone.

GERO 4860 Senior Thesis 3 s.h.
A capstone experience for the major in gerontology. Designing, implementing, and completing an empirical research project and paper on a topic approved by the thesis advisor.
Prereq.: senior status in GERO; GERO 4850 or SOC 4850.
Cross-listed: SOC 4860.

GERO 6906 Perspectives in Gerontology 3 s.h.
Focus on the major theoretical perspectives of aging and aging related research with a focus on health. Theories from gerontology, epidemiology, sociology, and psychology will be covered.

GERO 6915 Service Delivery Aging Policy 3 s.h.
An interdisciplinary analysis of services for older adults including an examination of major policies, programs, and trends in aging.

GERO 6960 Epidemiology of Aging 3 s.h.
Integration and application of epidemiologic theories; major conceptual issues regarding epidemiology and aging; and contemporary interdisciplinary concepts and research. Primary focus will be on the disease distribution and leading causes of death among our aging population.

GERO 6998 Anatomy and Physiology of Aging 3 s.h.
Using a systems approach, this course will examine the anatomical and physiological changes that occur with aging. It will discuss age-related disorders and evaluate the impact of these changes on activities and daily function.

GERO 6999 Research Methods 3 s.h.
This course serves as an introduction to major methodological issues and basic statistics in the social-scientific study of gerontology. Major topics include developmental perspective and conceptualization of change, basic developmental research design, conceptualization of research problems, research design, measurement, and data analysis. This course should enable students to formulate research questions, design studies, and determine measurement devices and methods of analysis from a developmental perspective.

GERO 7001 Long-Term Care 3 s.h.
This course will introduce students to the following topics: who needs long-term care; population distribution of long-term care and its current trends; long-term care industry; human medicine and long-term care; social structures and social inequalities in long-term care; culture components of long-term care; family care and social care; government, laws, and social policies of long-term care; and long-term care in a global perspective.
Prereq.: GERO 6960.

GERO 7090 Field Practicum 1-9 s.h.
Students will complete a 200-hour placement in an aging-related workplace. Variable credit 1-6 s.h. May be repeated for up to 9 s.h.

GERO 7094 Selected Topics 3 s.h.
An examination of contemporary topics in the field of gerontology. Examples of subject areas that may be covered: Nutrition, Pharmacology, Legal, etc. variable credit 1-9 hours may be repeated for up to 6 credit hours.
Kinesiology and Sport Science

KSS 1500  Physical Activity Core Concepts  1 s.h.
Essential concepts that document the relationship between physical activity and maintaining optimal health. Personal and social implications of physical inactivity are also explored. Two KSS activity courses must be taken in addition to this course to satisfy the requirements for GER credit.

KSS 1502  Volleyball  1 s.h.
Basic rules and fundamental skills of volleyball including serves, bump, overhead pass, and block.

KSS 1503  Flight: 1st Year Student-Athlete Experience  2 s.h.
FLIGHT: 1st Year Student-Athlete Experience is an introduction to the student-athlete development model through development research, NCAA programming, and practical application to prepare student-athletes for life after athletics as they develop the necessary skills to be engaged citizens and prepared professionals.

KSS 1504  Life After Sports  2 s.h.
Life After Sports is a continuation of the student-athlete development model through development research, NCAA programming, and practical application to prepare student-athletes for life after athletics as they develop the necessary skills to be engaged citizens and prepared professionals.

KSS 1507  Volleyball 2  1 s.h.
Intermediate-to-advanced volleyball skills including diving, rolling, and various team offensive and defensive strategies.
Prereq.: KSS 1502.

KSS 1508  Group Cycling  1 s.h.
Introduction to improving fitness levels through group cycling. The emphasis in this class will be on improving cardiovascular fitness through indoor stationary cycling bicycles. All fitness levels are welcomed and will acquire fitness benefits.

KSS 1509  Meditation  1 s.h.
Overview of practical meditation theory, with diverse practices culled from the world’s wisdom inheritance presented as guided meditation experiences. Historical perspective, along with relevant findings of current neuroscience research which support the efficacy of meditation are considered. The practices develop heightened awareness skills, whether practiced sitting, standing, walking, or supine.

KSS 1510  Archery  1 s.h.
Techniques of target archery. Selection, care, and repair of equipment.

KSS 1511  Badminton  1 s.h.
Skills, mechanics, and rules of badminton.

KSS 1512  Bowling  1 s.h.
Fundamentals of bowling the straight ball. Equipment selection, correction of errors, and scoring. For beginning bowlers. The bowling lanes are located off campus. Transportation to the lanes is not provided.

KSS 1513  Bowling 2  1 s.h.
Intermediate bowling. Refinement of bowling skills and use of the hook delivery. Tournament planning, team strategy, and competition.
Prereq.: KSS 1512.

KSS 1514  Fencing  1 s.h.
Fundamentals of foil fencing. Methods of attack and parry, and elementary boutting and judging.

KSS 1515  Fencing 2  1 s.h.
Intermediate strategies and techniques of foil fencing and boutting.
Prereq.: KSS 1514.

KSS 1516  Boxing for Beginners  2 s.h.
This course consists of learning how to properly workout like a boxer. Students will be trained to use the proper equipment, and how to stand, move, punch, and train like a boxer preparing to competitively box. Students will NOT be actually boxing another competitor.

KSS 1517  Horseback Riding 1  1 s.h.
Introductory course to the fundamentals of horsemanship, general knowledge of and safety around equines. This course provides students with a fun way to enjoy recreational horseback riding while learning important riding skills.
Prereq.: Must be taken with KSS 1517L.

KSS 1517L  Horseback Riding 1 Lab  1 s.h.
This course provides students with a fun way to enjoy recreational horseback riding while learning important riding skills. This course is off campus.
Coreq.: KSS 1517.

KSS 1519  Racquetball  1 s.h.
Racquetball rules and techniques for singles and doubles play. Basic strategy and skill development.

KSS 1520  Golf  1 s.h.
Fundamental skills of golf. Includes grip, stance, swing patterns, and putting as well as rules of course play.

KSS 1521  Golf 2  1 s.h.
Intermediate golf. Refinement of swing patterns, methods of instruction, correction of errors. Emphasis on the use of various clubs and types of shots.
Prereq.: KSS 1520.

KSS 1522  Tennis  1 s.h.
Fundamental skills of tennis including forehand and backhand drives and service. Basic rules, strategy, and method.

KSS 1523  Tennis 2  1 s.h.
Theory and practice of intermediate-to-advanced tennis skills and play.

KSS 1524  Physical Fitness and Exercise Program  1 s.h.
Discussion and participation in activities designed to develop and improve the health-related aspects of physical fitness including weight and stress control.

KSS 1526  Marksmanship  1 s.h.
The safety and practice of handling firearms. Target shooting in prone, kneeling and standing positions.

KSS 1528  Advanced Physical Fitness and Exercise Programs  1 s.h.
Discussion of and participation in strenuous activities designed to develop and improve the health- and performance-related aspects of physical fitness.

KSS 1529  Recreational Games  1 s.h.
Fundamentals, skills, techniques, strategy, and rules of racquetball, paddle tennis, table tennis, shuffleboard, and other recreational games.

KSS 1530  Learn to Swim  1 s.h.
Introduction to swimming and survival skills, floating, drown-proofing, basic swim strokes (side, elementary back, and front crawl), beginning diving, and simple aquatic games. This course is designed for the student who cannot swim; it is not open to swimmers.

KSS 1531  Aquatics  2 s.h.
Intermediate swimming. Introduction to back crawl, breaststroke and butterfly. Techniques in underwater swimming; use of mask, snorkel and fins. Elementary lifesaving skills and refinement of basic springboard diving.
Prereq.: HPES 1530.

KSS 1534  Fitness Swimming  1 s.h.
Utilization of freestyle swimming stroke to improve/maintain fitness across the lifespan. Content includes stroke mechanics, turning technique, and swim training program design to meet individual fitness and health goals.
Prereq.: Ability to swim for 250 yards.
KSS 1537 Aquatic Exercise 1 s.h.
Fitness through aquatic conditioning exercises tailored to the individual needs of the student. Open to swimmers and non-swimmers.

KSS 1544 Step Aerobics 1 s.h.
Rhythmic exercise and conditioning activities performed to music, utilizing a step platform as the foundation of the workout. Designed to improve cardiorespiratory endurance and flexibility. Emphasis on understanding the five basic components of fitness and basic principles and techniques involved in step training.

KSS 1545 Fold and Square Dance 1 s.h.
European and Mediterranean folk dances, American Square dances, and mixers. Beginning materials and practice.

KSS 1547 Flexibility and Core Training 1 s.h.
When performed properly, flexibility can reduce injuries, help recover from injuries, correct muscle imbalances, and recover from exercise. Stretching has also been shown to promote relaxation and stress reduction. This course will cover flexibility utilizing flexbands. In addition, core work and light resistance training will be explored.

KSS 1548 Aerobic Dance 1 s.h.
Rhythmic exercises and conditioning activities performed to music. Designed to improve cardiovascular fitness, flexibility, and general muscle tone.

KSS 1549 Varsity Competition 1 s.h.
Credit may be obtained through competition in varsity athletic programs. Prereq.: Consent of coach.

KSS 1550 Pilates 1 s.h.
Instruction in principles of body alignment and posture and participation as it pertains to fundamental Pilates techniques.

KSS 1551 Student Athlete Experience 1 s.h.
This course will provide an orientation to student athletes on understanding the demands related to life as a student athlete. This course will focus on various topics related to life-skills such as time management and study skills, campus and community leadership, sports nutrition, professionalism and etiquette, Title IX and sexual harassment, personal financial management and budgeting, and career building and interview skills.

KSS 1552 Yoga 1 s.h.
Instruction in principles of meditation, body alignment and posture, and participation as it pertains to fundamental yoga techniques.

KSS 1553 Yoga 2 1 s.h.
Builds on the groundwork of fundamental postures, breathing, present moment awareness practices, and various methods for removal of mental and physical tensions introduced in KSS 1552. Practices are drawn from the inheritance of Yoga (Hatha and Raja), for further skill development for managing health and vitality of mind and body. Prereq.: KSS 1552 or consent of instructor.

KSS 1554 Fitness Walking 1 s.h.
Information on the benefits of walking for fitness. Health advantages, appropriate conditioning, pace, warm-up and cool-down. Practical experience in the skills needed to achieve success in developing and adhering to a walking program.

KSS 1555 Jogging 1 s.h.
Holistic approach to the theory and practice of jogging with emphasis on the physiological benefits.

KSS 1556 Racquetball 2 1 s.h.
Advanced racquetball techniques, strategy, conditioning, and mental preparation for singles, doubles, and tournament play. Emphasis on the use of various advanced shots, positioning, and officiating. Prereq.: KSS 1519.

KSS 1557 Weight Training 1 s.h.
Introduction to progressive resistive exercise for men and women. Topics include strength training, types of equipment, exercise techniques, circuit training, competitive weightlifting, body building, and injury prevention.

KSS 1558 Physical Fitness for Life 2 s.h.
Participation in exercise and physical activities, and identification of resources and assessment instruments utilized in developing an individualized, well-rounded, effective, lifelong physical fitness program. One hour lecture, two hours lab.

KSS 1559 Aerobic Conditioning Activities 2 s.h.
Analyses and practices in activities designed to develop and improve cardiovascular endurance. Such activities include, but are not limited to, aquatics, fitness walking and jogging. One hour lecture, two hours lab. Prereq.: Exercise science major, or Physical education major.

KSS 1560 Resistance Training 2 s.h.
Concepts and applications of progressive resistance exercise. Emphasis on advanced principles and techniques for developing muscular strength and endurance for fitness and athletic performance. Two hours lab. Prereq.: major in exercise science or permission of instructor.

KSS 1563 Rock Climbing 1 s.h.
Instruction and participation in fundamental rock climbing techniques that include safely constructing anchor systems, employing belay methods, equipment selection, and beginning climbing skills.

KSS 1564 Bicycling 1 s.h.
Instruction and practice in bicycling skills, techniques, and procedures necessary for intermediate or long trips. Students must provide their own three-, five-, or ten-speed bicycle.

KSS 1565 Self Defense 1 s.h.
The defensive techniques of Judo and Aikido designed to counter attacks with a knife, club, gun or bare fist. Balance, control, safety, falling.

KSS 1566 Judo 1 s.h.
Introduction to the history, philosophy and techniques of Judo. Fundamental techniques include falls, hand and leg throws, grappling, various holds and joint locks.

KSS 1568 Taekwondo/Karate 1 s.h.
An introduction to the history, philosophy and techniques of taekwondo/karate. Fundamental techniques include: stances, kicks, punches, and forms.

KSS 1569 Taekwondo Karate 2 1 s.h.
This course consists of an advanced refinement of taekwondo/karate forms and techniques as well as the enhancement and application of their techniques. Students will be presented with advanced skills to further their knowledge of the history and traditions of this martial art. This course builds upon the basic knowledge learned from KSS 1568 (taekwondo/karate I). Prereq.: KSS 1568.

KSS 1588 Selected Activities in Kinesiology and Sport Science 1 s.h.
Knowledge of and practice in a particular area of dance, fitness, or sport. Activity is announced each time the course is offered. May be repeated up to 4 s.h. with change in topic.

KSS 1588G Selected Activities in Kinesiology and Sport Science Officiating 1 1-2 s.h.
Knowledge of and practice in a particular area of dance, fitness, or sport. Activity is announced each time the course is offered. May be repeated up to 4 s.h. with change in topic.

KSS 1589 Scientific Basis of Fitness 2 s.h.
Introduction to components of physical fitness and their physiological basis. Role of exercise in prevention of cardiovascular and other hypokinetic diseases. Participation and application of training principles in a variety of fitness activities. Selection and proper use of exercise equipment. One hour lecture, two hours lab. Prereq.: Physical education major.

KSS 1590 Foundations of Fitness 3 s.h.
Students will learn the fundamentals of fitness as it relates to lifestyle choices and health. Discussion and participation in activities designed to develop and improve the health-related aspects of physical fitness including weight and stress control will be used to develop a personal fitness program through personal goals.
KSS 1595  Introduction to Kinesiology and Sport Science  2 s.h.
Introduction to physical education, exercise science and related professions. Includes exploration of the general concepts, goals, aims, objectives, professional organizations, scholarly literature, sub-disciplines within the field, and career employment opportunities.

KSS 2605  Sports First Aid and Injury Prevention  3 s.h.
Basic injury prevention, evaluation, and emergency care. Certification in ARC Standard First Aid and Adult CPR. Basic wrapping and strapping techniques used with common sports injuries. Two hours lecture, two hours lab.
Prereq.: Exercise science major, Wellness minor, or consent of instructor.

KSS 2615  Methods of Teaching Rhythmic Aerobic Activity  2 s.h.
Rhythm and movement fundamentals related to aerobic dance and step aerobics. Methods and materials of teaching rhythmic aerobic activity culminating in practical teaching experience in the classroom. One hour lecture, two hours lab.
Prereq.: KSS 1589.

KSS 2620  Exercise Equipment Management  1 s.h.
Factors to consider when purchasing new or used exercise equipment, equipment repair and preventive maintenance procedures, and equipment-related risk management.
Prereq.: Permission of instructor.

KSS 2625  Pedagogical Aspects of Exercise Science  3 s.h.
Effective instructional practices and development of organizational skills and characteristics required for teaching in exercise programs. Two hours lecture, two hours lab.
Prereq.: KSS 1599 or KSS 1595.

KSS 2630  Lifeguard Training  1 s.h.
Water rescue, preventive lifeguarding techniques, emergency procedures. Red Cross certificate granted upon satisfactory completion of all requirements.
Prereq.: Ability to swim 300 yards continuously; tread water for 2 minutes.

KSS 2631  Water Safety Methods for Instructors  2 s.h.
Techniques for teaching and supervising swimming, emergency water safety, and basic water safety. Introduction to infant and preschool aquatic programs. A water safety instructor’s certificate granted upon satisfactory completion of all requirements.
Prereq.: Current lifeguard training certificate or emergency water safety certificate.

KSS 2632  Skin and Scuba Diving  2 s.h.
Basic skin-diving with the use of mask, fins, and snorkel. Scuba diving skills with the use of tank and regulator. Emphasis on diving physics, physiology, lifesaving, first aid, and safety skills related to skin and scuba diving. Two hours lecture, two hours lab. Student must furnish mask, fins, and snorkel.

KSS 2635  Open Water Scuba Diving  1 s.h.
Practical experiences in physiological and psychological stress, underwater navigation, effects of hypothermia, decompression, repetitive diving, and rescue techniques. Students completing this course receive basic scuba certification. Five hours lecture, ten hours lab per semester.
Prereq.: KSS 2632.

KSS 2637  Skin, Scuba and Openwater Diving  3 s.h.
Basic scuba and skin-diving skills with use of tank and regulator. Practical experiences in physiological and psychological stress, effects of hypothermia, decompression, and rescue techniques related to repetitive diving. Students completing course receive basic openwater certification. Students must furnish mask, fins, and snorkel. Two days openwater field experience. Two hours lecture, two hours lab.

KSS 2672  Biomechanics  3 s.h.
Knowledge and methods of mechanics as they apply to the structure and function of the living human system. Muscular structure and function in relation to physical movement, analysis of fundamental movements. Includes the physical characteristics of the human body and principles of mechanical physics. Two hours lecture. Two hours lab.
Prereq.: BIOL 1552, BIOL 1552L or BIOL 1545, BIOL 1545L.

KSS 2697  Camping  2 s.h.
The specific skills and problems encountered in camping: shelter, clothing, food, transportation, and site selection. Two hours lab.

KSS 2699  Sport in American Culture  3 s.h.
Sport in American culture from the colonial period to the present as it relates to such areas as education, literature, film and drama, minorities, politics, professional sport, religion and urbanization.

KSS 3700  Exercise Testing and Prescription 1  4 s.h.
Introductory exercise leadership skills including exercise testing and prescription, and design of safe and effective programs. Includes a minimum of 30 hours of field experience in exercise testing, leadership, observation, and career exploration. Content based on American College of Sports Medicine objectives.
Prereq.: KSS 1599 and KSS 1595.

KSS 3705  Statistics Research in Exercise Science  3 s.h.
Scientific methods in exercise science including research design and statistical analyses. Experience with statistical software and understanding published research. Two hours lecture, two hours lab.
Prereq.: MATH 1510 or Level 45 on Math Placement Test and greater or equal to 45 credit hours.

KSS 3710  Physiology of Exercise  4 s.h.
Acute responses and chronic adaptations of the body to physiological demands of physical activity. Topics related to the optimization of performance in sport and exercise include neuromuscular and cardiorespiratory function, energy production and utilization, and environmental influences.
Prereq.: Exercise science major and CHEM 1515, and BIOL 1552 or BIOL 2601.
Concurrent with: KSS 3710L.

KSS 3710L Physiology of Exercise Laboratory  1 s.h.
Experiments and basic laboratory procedures in the field of exercise physiology.
Concurrent with: KSS 3710.

KSS 3720  Kinesiology and Applied Anatomy  4 s.h.
Muscular structure and function in relation to physical movement; analysis of fundamental movements.
Prereq.: PHYS 1501 or PHYS 1506.

KSS 3725  Mindfulness  2 s.h.
Mindfulness is a state of active, open attention on the present and the practice of being aware moment-to-moment. Students will learn techniques of mindfulness. Topics include breath awareness, sitting meditation, body scanning, walking meditation, eating meditation, yoga, loving kindness and yoga nidra.
Prereq.: PSYC 1560 or KSS 1590.

KSS 3730  Exercise Testing and Prescription 2  4 s.h.
Intermediate exercise testing, exercise prescription based on metabolic calculations and program development for special populations. Supervised field experience in exercise leadership involving 5-8 hours per week. Content based on American College of Sports Medicine objectives. KSS 3710 may be taken concurrently with KSS 3730.
Prereq.: KSS 3700, KSS 3720 and KSS 3710.

KSS 3750  Principles of Coaching  2 s.h.
The scientific, psychological, and management aspects of coaching. Includes ethics and management responsibilities, personnel management, community relations, conditioning, and other related topics.
Prereq.: Junior standing.

KSS 3760  Strength Training and Conditioning  3 s.h.
Scientific principles, concepts, and adaptations to resistance exercise. Practical application of lifting and spotting technique, testing procedures, program design, and organization and administration of the strength and conditioning facility. Two hours lecture, two hours lab.
Prereq.: KSS 1560 and KSS 3710.
KSS 3765  Athletic Training 1  2 s.h.
Practical and theoretical aspects of the prevention of athletic injuries. Includes supplies, wrapping and strapping, protective equipment. Emphasizes prevention, evaluation, and emergency care. One hour lecture, two hours lab.
Prereq.: KSS 1595 and KSS 2605.

KSS 4803  Issues and Trends in Exercise Science  1 s.h.
Current issues and trends in the impact on exercise science and the general public as they relate to the American College of Sports Medicine’s behavioral objectives for various professional certificates.
Prereq.: 64 s.h. or permission of instructor.

KSS 4805  Administration of Exercise Programs  3 s.h.
Provides an overview of legal, management, and marketing skills necessary to implement exercise related wellness programs. Requires development of business plan including facility design and equipment selection.
Prereq.: KSS 3700.

KSS 4810  Exercise Testing and Prescription 3  4 s.h.
Clinical exercise tests (electrocardiography, pulmonary function, submaximal/ maximal cardiorespiratory tests) and exercise prescription (cardiovascular, pulmonary, diabetes, stress, cancer, PVD and hypertension). Supervised experience in clinical exercise facilities nine hours during the semester. Content based on American College of Sports Medicine objectives. 4 s.h.
Prereq.: KSS 3705, KSS 3730, and KSS 3710.

KSS 4855  Organization and Administration of Kinesiology and Sport Science Programs  3 s.h.
Organizational patterns and administrative methods in activities, including institutional programs, intramurals and recreation.
Prereq.: 20 s.h. in major.

KSS 4865  Athletic Training 2  2 s.h.
Advanced techniques of athletic training with emphasis on evaluation, treatment and rehabilitation of athletic injuries. Topics include application of therapeutic modalities, reconditioning programs, and the role of the athletic trainer in sports medicine. One hour lecture, two hours lab.
Prereq.: KSS 3765.

KSS 4870  Exercise and Aging for Health Professions  3 s.h.
For majors in Gerontology/Health Professions who work with older adults in exercise/physical activity programs. Emphasis on physical aspects/limitations of aging, exercise testing, prescription, and programs for the elderly. Not applicable to the major in Exercise Science.
Prereq.: Senior standing or permission of instructor.

KSS 4875  Exercise Counseling and Behavioral Strategies  4 s.h.
Exercise Counseling and Behavioral Strategies Evidence-based theories and domains geared toward fostering change, growth, and self-actualization in exercise. The scientific foundations of basic exercise counseling and behavioral strategies that enable effective wellness coaching are explored.
Prereq.: Junior standing.

KSS 4880  Internship  8 s.h.
A culminating experience in an approved fitness or sports-related setting under the direct supervision of a qualified individual and coordinated by a supervising faculty member. Requires 400 hours to obtain 8 s.h. May be taken concurrently with KSS 4875.
Prereq.: Completion of Exercise Science core requirements through KSS 4810.

KSS 4888  Selected Topics in Kinesiology and Sport Science  1-3 s.h.
In-depth study of special subject matter within the field of physical education. Topic announced each time course is offered. May be repeated for a maximum of 6 s.h. with change in topic.
Prereq.: 72 s.h. or consent of instructor.

KSS 4888J  Selected Topics in Kinesiology and Sport Science Field Experience in ExRx with Special Populations  1-3 s.h.
In-depth study of special subject matter within the field of physical education. Topic announced each time course is offered. May be repeated for a maximum of 6 s.h. with change in topic.
Prereq.: 72 s.h. or consent of instructor.

KSS 4890  Undergraduate Research  1-3 s.h.
Research participation under the direction and guidance of a full-time faculty member. Provides the advanced student with research experience in HPES. May be repeated to a maximum of six s.h. Junior standing or permission of instructor.

KSS 4898  Seminar KSS  1 s.h.
Special and current problems in KSS.
Prereq.: 72 semester hours.

KSS 6935  Biodynamics and Human Performance  2 s.h.
The physiology of human exercise responses to various stress conditions such as environmental, psychosocial, disease, and maximal performance.
Prereq.: HEPE 4899 or equivalent.

KSS 6940  Exercise Program Administration  3 s.h.
General guidelines for managing, developing, delivering and evaluating exercise programs with specific behavioral objectives for program directors, exercise leaders, and exercise technicians as established by the American College of Sports Medicine.
Prereq.: KSS 3710 or permission of instructor.

KSS 6990  Independent Study  1-3 s.h.
Individual study and projects under faculty supervision. May be repeated to a maximum of three semester hours.
Prereq.: Permission of instructor and department chair.

Medical Laboratory Science

MLS 1501  Introduction to the Medical Laboratory Profession  2 s.h.
Overview of the medical laboratory profession, ethics, responsibilities and clinical relevance of laboratory procedures.
Prereq.: MATH 1504 or level 20 on Math Placement Test, high school chemistry or CHEM 1501, high school biology or BIOL 1505.
Concurrent with: MLS 1501L.

MLS 1501L  Introduction to the Medical Laboratory Profession Laboratory  1 s.h.
Phlebotomy, specimen collection and processing; basic medical laboratory exercises. Three hours lab per week.
Prereq.: MATH 1504 or level 20 on Math Placement Test, high school chemistry or CHEM 1501, high school biology or BIOL 1505.
Concurrent with: MLS 1501.

MLS 3700  Clinical Chemistry 2  3 s.h.
Instrumentation and clinical relevance of applied chemical techniques including immunoassays, therapeutic drug monitoring, enzymes, trace elements, and point-of-care technology; quality control and assurance, case studies, and problem solving in clinical chemistry.
Prereq.: MLT 2601 or CHEM 1515.
Concurrent with: MLS 3700L.

MLS 3700L  Clinical Chemistry 2 Laboratory  1 s.h.
Thyroid, digoxin, B12, folic acid, anticellular antibodies and T and B cell receptor procedures utilized in a clinical laboratory. Three hours lab per week.
Prereq.: MLT 2601, MLT 2601L or CHEM 1515.
Concurrent with: MLS 3700.

MLS 3701  Clinical Hematology 1  2 s.h.
Hematopoiesis; theory and laboratory application of manual procedures in hematology including cell counts, hemoglobin, hematocrit, and differentials; introductory hemostasis and laboratory applications. Two hours of lecture per week.
Prereq.: MLS 1501, MLS 1501L, BIOL 2601 with a minimal grade of "C".

MLS 3701L  Clinical Hematology 1 Laboratory  1 s.h.
Laboratory application of manual procedures in hematology including cell counts, hemoglobin, hematocrit, and differentials; introductory hemostasis and laboratory applications. Three hours of laboratory per week.
Prereq.: MLT 1501, MLT 1501L, BIOL 2601 with a minimal grade of "C".
MLS 3702  Clinical Hematology  2 s.h.
Advanced theory and laboratory procedures in hematology and hemostasis, including leukemia, anemia, hematopathology and coagulation disorders; abnormal differentials and automated methods. Two hours of lecture per week.
Prereq.: MLS 3701, MLS 3701L with a minimal grade of "C".

MLS 3702L  Clinical Hematology Laboratory  1 s.h.
Laboratory procedures in hematology and hemostasis, including leukemia, anemia, hematopathology and coagulation disorders; abnormal differentials and automated methods. Three hours of laboratory per week.
Prereq.: MLS 3701, MLS 3701L with a minimal grade of "C".

MLS 3703  Clinical Immunology  3 s.h.
Fundamentals of immunology, including both humoral and cellular immunological responses. Applications of immunological methods in medical research and patient treatment. Recommended BIOL 3702.
Prereq.: BIOL 2601.

MLS 3703L  Clinical Immunology Laboratory  1 s.h.
VDRL, ASO, febrile, latex, pregnancy, and viral tests; flocculation, precipitation, complement fixation, and titration procedures for various diseases. Three hours lab per week. Identical with MLT 3703L and BIOL 3703L.
Prereq.: MLS 1501, MLS 1501L, BIOL 2602.
Concurrent with: MLS 3703.

MLS 3787  Diagnostic Microbiology  3 s.h.
Clinical applications of human pathogenic microorganisms; infections, frequency, isolation, identification, and treatment of bacteria, fungi, viruses, and parasites. Case studies, problem solving, and quality assurance in clinical microbiology. Three hours lecture per week.
Prereq.: BIOL 2602.
Prereq.: MLS 3787L.

MLS 3787L  Diagnostic Microbiology Laboratory  2 s.h.
A clinical approach to the study of bacteria, fungi, viruses, and parasites. Methods to isolate and identify clinically significant pathogens from clinical specimens; case studies in clinical microbiology. Six hours lab per week. Identical with MLT 3787L.
Prereq.: BIOL 2602.
Concurrent with: MLS 3787L.

MLS 4800  Advanced Clinical Chemistry  4 s.h.
Didactics and critical analysis of clinical chemistry. Four hours of lecture. Grading is Traditional or PR.
Prereq.: Acceptance into a clinical internship.

MLS 4800L  Advanced Clinical Chemistry Clinical Experience  2 s.h.
Clinical experience and critical analysis of clinical chemistry; Competency based clinical practice. Grading is Traditional or PR.
Prereq.: Acceptance into a clinical internship.

MLS 4801  Advanced Hematology  4 s.h.
Diagnosis and clinical analysis of clinical hematology. Four hours of lecture. Grading is Traditional or PR.
Prereq.: Acceptance into a clinical internship.

MLS 4801L  Advanced Hematology Clinical Practice  3 s.h.
Clinical practice of clinical hematology. Competency based clinical practice. Grading is Traditional PR.
Prereq.: Acceptance into a clinical internship.

MLS 4802  Advanced Immunohematology  4 s.h.
Didactics and critical analysis of blood banking, Immunohematology, and Transfusion Medicine. Four hours of lecture. Grading is Traditional or PR.
Prereq.: Acceptance into a clinical internship.

MLS 4802L  Advanced Immunohematology Clinical Practice  3 s.h.
Clinical practice and critical analysis of blood banking, Immunohematology, and Transfusion Medicine. Competency based clinical practice. Grading is Traditional or PR.
Prereq.: Acceptance into a clinical internship.

MLS 4803  Advanced Microbiology  5 s.h.
Didactics and critical analysis of bacteriology, mycology, virology and Parasitology. Five hours of lecture. Grading is Traditional or PR.
Prereq.: Acceptance into a clinical internship.

MLS 4803L  Advanced Microbiology Clinical Practice  3 s.h.
Clinical practice and critical analysis of bacteriology, mycology, virology, and parasitology. Competency based clinical practice. Grading is Traditional or PR.
Prereq.: Acceptance into a clinical internship.

MLS 4804  Miscellaneous Clinical Experience  4 s.h.
Didactic and clinical analysis of specimen collection and processing. Management, education, molecular diagnostics, hemostasis, clinical immunology, and urinalysis and body fluids. Four hours of lecture. Capstone course requiring laboratory research project. Grading is Traditional or PR.
Prereq.: Acceptance into a clinical internship.

MLS 4804L  Miscellaneous Clinical Practice  2 s.h.
Clinical practice and critical analysis of specimen collection and processing, management, education, molecular diagnostics, hemostasis, clinical immunology, and urinalysis and body fluids. Competency based clinical practice. Capstone course requiring laboratory research project. Grading is Traditional or PR.

Medical Laboratory Technology

MLT 1501  Introduction to the Medical Laboratory Profession  2 s.h.
Overview of the medical laboratory profession, ethics, responsibilities and clinical relevance of laboratory procedures.
Prereq.: MATH 1504 or level 20 on Math Placement Test, high school chemistry or CHEM 1501, high school biology or BIOL 1505.
Concurrent with: MLT 1501.

MLT 1501L  Introduction to the Medical Laboratory Profession Laboratory  1 s.h.
Phlebotomy, specimen collection and processing; basic medical laboratory exercises. Three hours lab per week.
Prereq.: MATH 1504 or level 20 on Math Placement Test, high school chemistry or CHEM 1501, high school biology or BIOL 1505.
Concurrent with: MLT 1501.

MLT 1502  Urinalysis and Body Fluids  2 s.h.
Theory and techniques in the analysis of urine and body fluids.
Prereq.: MLT 1501, MLT 1501L, BIOL 2601.
Concurrent with: MLT 1502L.

MLT 1502L  Urinalysis and Body Fluids Laboratory  1 s.h.
Chemical and microscopic analysis of urine. Three hours lab per week.
Prereq.: MLT 1501, MLT 1501L, BIOL 2601.
Concurrent with: MLT 1502.

MLT 1503  Immunohematology  3 s.h.
Fundamental theories and techniques of immunohematology and blood banking; genetic theories, problem solving, and case studies.
Prereq.: BIOL 2601 and MLT 1501.
Concurrent with: MLT 1503L and BIOL 2602.

MLT 1503L  Immunohematology Laboratory  1 s.h.
ABO and RH typing, direct and indirect antiglobulin testing, compatibility testing. Three hours lab per week.
Prereq.: MLT 1501, MLT 1501L, BIOL 2601.
Concurrent with: MLT 1503.

MLT 2601  Clinical Chemistry  1 2 s.h.
Medical laboratory applications of clinical chemistry.
Prereq.: MLT 1501, MLT 1501L, CHEM 1515.
Concurrent with: MLT 2601L.
MLT 2601L Clinical Chemistry 1 Laboratory 1 s.h.
Spectrophotometric, semi-automated, and automated analysis of glucose, electrolytes, enzymes, and other chemical constituents of serum. Three hours lab per week.
Prereq.: MLT 1501, MLT 1501L, CHEM 1515.
Concurrent with: MLT 2601.
MLT 2603 Topics in Medical Laboratory Technology 4 s.h.
Clinical laboratory applications to molecular diagnostics, serology, virology and parasitology. Regulations, information processing, education, ethical, professional issues. Critical analysis of clinical laboratory information. Two hours lecture and six hours laboratory per week.
Prereq.: MLT 1502 and MLT 1503 with a minimal grade of "C".
MLT 2687L Microbiology for Health Care Laboratory 1 s.h.
Medical microbiology laboratory for health care professionals. Laboratory methods in the transmission, identification, prevention, and treatment of common bacterial, viral, fungal, and parasitic pathogens with a focus on nosocomial infections. Three hours lab per week.
Prereq.: BIOL 1545, BIOL 1551, BIOL 2601, or permission of instructor.
Concurrent with: BIOL 1560.
MLT 3700 Clinical Chemistry 2 3 s.h.
Instrumentation and clinical relevance of applied chemical techniques including immunoassays, therapeutic drug monitoring, enzymes, trace elements, and point-of-care technology; quality control and assurance, case studies, and problem solving in clinical chemistry.
Prereq.: MLT 2601 or CHEM 1515.
Concurrent with: MLT 3700L.
MLT 3700L Clinical Chemistry 2 Laboratory 1 s.h.
Thyroid, digoxin, B12, folic acid, antinuclear antibodies and T and B cell receptor procedures utilized in a clinical laboratory. Three hours lab per week.
Prereq.: MLT 2601, MLT 2601L or CHEM 1515.
Concurrent with: MLT 3700.
MLT 3701 Clinical Hematology 1 2 s.h.
Hematopoiesis; theory and laboratory application of manual procedures in hematology including cell counts, hemoglobin, hematocrit, and differentials; introductory hemostasis and laboratory applications. Two hours of lecture per week.
Prereq.: MLT 1501, MLT 1501L, BIOL 2601 with a minimal grade of "C".
MLT 3701L Clinical Hematology 1 Laboratory 1 s.h.
Laboratory application of manual procedures in hematology including cell counts, hemoglobin, hematocrit, and differentials; introductory hemostasis and laboratory applications. Three hours of laboratory per week. Co-requisite MLT 3701.
Prereq.: MLT 1501, MLT 1501L, BIOL 2601 with a minimal grade of "C".
MLT 3702 Clinical Hematology 2 2 s.h.
Advanced theory and laboratory procedures in hematology and hemostasis, including leukemia, anemia, hematopathology and coagulation disorders; abnormal differentials and automated methods. Two hours of lecture per week.
Prereq.: MLT 3701, MLT 3701L with a minimal grade of "C".
MLT 3702L Clinical Hematology 2 Laboratory 1 s.h.
Laboratory procedures in hematology and hemostasis, including leukemia, anemia, hematopathology and coagulation disorders; abnormal differentials and automated methods. Three hours of laboratory per week. Co-requisite MLT 3702.
Prereq.: MLT 3701, MLT 3701L with a minimal grade of "C".
MLT 3703 Clinical Immunology Laboratory 1 s.h.
VDRL, ASO, febrile, latex, pregnancy, and viral tests; flocculation, precipitation, complement fixation, and titration procedures for various diseases. Three hours lab per week. Identical with MLS 3703L and BIOL 3703L.
Prereq.: MLS 1501, MLS 1501L, BIOL 2602.
Concurrent with: MLS 3703.
MLT 3706 Medical Laboratory Seminar 2 s.h.
Internship evaluation, special topics in the clinical laboratory. Case studies in the clinical laboratory.
Prereq.: MLT 2603.
Concurrent with: MLT 3716.
MLT 3710 Interpretation of Clinical Laboratory Results 1 s.h.
The significance of laboratory results and how they relate to gender and age.
Prereq.: MLT 2601, MLT 2601L or permission of instructor.
MLT 3716 Clinical Internship 8 s.h.
Thirty-six hours per week of practical application of skills in affiliate hospitals and private laboratories.
Prereq.: completion of 30 s.h. of MLT curriculum with a grade of "C" or better and a minimum 2.5 GPA.
Concurrent with: MLT 3706.
MLT 3787 Diagnostic Microbiology 3 s.h.
Clinical applications of human pathogenic microorganisms; infections, frequency, isolation, identification, and treatment of bacteria, fungi, viruses, and parasites. Case studies, problem solving, and quality assurance in clinical microbiology. Three hours lecture per week.
Prereq.: BIOL 2602.
Concurrent with: MLT 3787L.
MLT 3787L Diagnostic Microbiology Laboratory 2 s.h.
A clinical approach to the study of bacteria, fungi, viruses, and parasites. Methods to isolate and identify clinically significant pathogens from clinical specimens; case studies in clinical microbiology. Six hours lab per week. Identical with BIOL 3787L, MLS 3787L. 2 s.h.
Prereq.: BIOL 2602.
Concurrent with: MLT 3787.

Public Health

PHTL 1500 Introduction to Online Learning in Health Professions 3 s.h.
Prepare students to take online courses including the use of the Blackboard learning environment and orient students to YSU and YSU's Health Professions programs. Help students acquire basic skills to be successful in online learning and emphasize skills and resources necessary to be successful in their personal, academic and career-related pursuits. In addition, this course will introduce students to topics such as career assessment and how to become a successful health professional in the 21st Century. Should be taken during a student's first 30 hours at YSU. Listed also as AHLT 1500 and RESC 1500.
Prereq.: PHTL, AHLT or RESC major.

PHTL 1513 Introduction to Environmental Health and Safety 3 s.h.
Provides and introduction to and overview of the key areas of environmental health, one of the core areas of public health. Using the perspectives of the population and community, the course will cover factors associated with the development of environmental health problems.
Gen Ed: Environmental Sustainability, Social and Personal Awareness.

PHTL 1531 Fundamentals of Public Health 3 s.h.
Provides an introduction to public health concepts and practice by examining the philosophy, purpose, history, organization, functions, tools, activities, and results of public health at the national, state, and community levels. Introduces the core disciplines of public health, and current events and issues in the field.

PHTL 1568 Healthy Lifestyles 3 s.h.
Personal and consumer health issues and prevention of premature death analyzed from physical, emotional, social and spiritual perspectives. Plans for disease prevention and healthful living. Importance of health promotion to the individual, region, nation and world.
PHLT 2607  Ethical Issues in Public Health  3 s.h.
Examines practical aspects of ethics and public health. This course will help students develop the analytical skills necessary for evaluating ethical issues related to public health policy and public health prevention, treatment, and research.
Prereq.: PHLT 1531 or PHLT 1568.

PHLT 2692  Human Sexuality  3 s.h.
An interdisciplinary approach to the study of human sexuality.
Prereq.: PHLT 1568.
Cross listed with PSYC 2692.

PHLT 3702  Health Education Theory and Methods  3 s.h.
Overview of health education theory, history, ethics, and methods for the community, school, workplace and health care setting. Provides a foundation in teaching methods. Also listed as HEPE 3702.
Prereq.: PHLT 1568.

PHLT 3709  Elements of Urban Environmental Health Practices  3 s.h.
Focus on development and implementation issues of environmental and public health programs necessary for urban and rural communities to meet acceptable public health standards at the local health department level with emphasis on resources and staffing. AHLT 3708, or permission of instructor. Also listed as AHLT 3709.
Prereq.: PHLT 1568.

PHLT 3715  Health Education for Grades PreK-6  3 s.h.
Comprehensive School Health Education curricula, methods and materials for teaching pre-kindergarten through sixth grade students. Also listed as HEPE 3715.
Prereq.: PHLT 1568, PHLT 3702 and BIOL 1545 or AHLT 1500 and AHLT 1501.

PHLT 3716  Health Education for Grades 7-12  3 s.h.
Comprehensive School Health Education curricula, methods and materials for teaching seventh through twelfth grade students.
Prereq.: PHLT 1568, PHLT 3702 and BIOL 1545 or AHLT 1500 and AHLT 1501.

PHLT 3725  Topics in Public Health  3 s.h.
Examines topics of relevance to public health. Specific topics include current issues and emerging research findings, with a focus on health behavior and health promotion, epidemiology, public health administration, environmental health, biostatistics, through analysis of public health problems, and application of principles and practices of public health.
Prereq.: PHLT 1531.

PHLT 3731  Drug Use and Abuse  3 s.h.
Alcohol, tobacco, and other drug use and their relationship to behavior and society. Emphasis on prevention, early intervention, and treatment in the behavioral medicine, health care, educational and criminal justice systems.
Prereq.: PHLT 1568.

PHLT 3757  Health and Disease  4 s.h.
Study of the major chronic and communicable diseases affecting humans. Emphasis on etiology, prevention through health education and health promotion methods, and materials.
Prereq.: PHLT 1568, BIOL 1545 or AHLT 1500 and AHLT 1501.

PHLT 3791  Community Health  3 s.h.
Study of the need for organized community health efforts: problems of chronic and communicable diseases, environmental health, world health, and the public and private agencies involved in their solutions.
Prereq.: PHLT 1568.

PHLT 4801  Field Work in Health Education  1-3 s.h.
Provides the public health major with a supervised teaching or agency experience. Three to twelve hours per week.
Prereq.: PHLT 3701L and PHLT 3791.

PHLT 4826  Community Health Planning and Promotion  4 s.h.
Fundamental techniques for assessing needs, planning, marketing and implementing health promotion programs in the workplace and community.
Prereq.: PHLT 3791 and AHLT 5807.

PHLT 4827  Evaluation of Health Promotion Programs  3 s.h.
Theories and methods of program evaluation for assessing the quality of health promotion programs.
Prereq.: PHLT 4826.

PHLT 4828  Grant Writing  3 s.h.
Methods and techniques for writing grant proposals related to health. Emphasis on competence in development of narrative, program plan, evaluation design, time line, identifying grant sources and managing funded projects.
Prereq.: PHLT 4826 and PHLT 4827.

PHLT 4891  Public Health Internship  8 s.h.
Supervised experience designed to provide an opportunity to enable students to apply entry-level competencies acquired in the classroom setting to public health practice through experiential activities. The student will be required to be at the internship approximately 23-24 hours per week in a 15 week semester, for a total of 350 hours.
Prereq.: senior standing and consent of instructor.

PHLT 4892  Environmental Health and Safety Internship  8 s.h.
Supervised experience designed to provide an opportunity to enable students to apply entry-level competencies acquired in the classroom setting to environmental health practice through experiential activities. The student will be required to be at the internship approximately 23-24 hours per week in a 15 week semester, for a total of 350 hours.
Prereq.: senior standing and consent of instructor.

PHLT 4898  Environmental Health and Safety Senior Seminar  3 s.h.
Synthesis of professional course work. Development of resume and professional portfolio; preparation for internship; administration of outcome assessment instruments for public health majors.
Prereq.: senior standing and consent of instructor.

PHLT 4899  Public Health Senior Seminar  3 s.h.
Synthesis of professional course work. Development of resume and professional portfolio; preparation for internship; administration of outcome assessment instruments for public health majors; preparation for the CHES certification exam.
Prereq.: Senior standing and consent of instructor.
Gen Ed: Capstone.

PHLT 5804  Multicultural Health  3 s.h.
Explore multicultural models of health, illness, and treatments or therapies to increase understanding of various approaches to prevention, health promotion, healing, and maintenance of health and well-being.
Prereq.: PHLT 1568 or PHLT 1531 and junior standing.

PHLT 5810  Agents of Mass Casualty  3 s.h.
Explorations of biological agents, chemical agents or radiological and nuclear devices, terrorism, security, emergency planning, and community and public health roles in the event of a deployment of these agents. Increase understanding through case analysis of how to apply course concepts to real world scenarios.
Prereq.: PHLT 1531 or PHLT 1568 and junior standing.

PHLT 5810X  Agents of Mass Casualty XR  3 s.h.
Explorations of biological agents, chemical agents or radiological and nuclear devices, terrorism, security, emergency planning, and community and public health roles in the event of a deployment of these agents. Increase understanding through case analysis of how to apply course concepts to real world scenarios.
Prereq.: PHLT 1531 or PHLT 1568 and junior standing.

PHLT 5812  Crisis Management in Public Health  3 s.h.
Exploration of roles, thought processes and actions of public health professionals during crisis situations, by understanding the anatomy of crises. Increase knowledge through case analysis of how to apply course concepts to real world scenarios.
Prereq.: PHLT 1531 or PHLT 1568 and junior standing.
PHLT 5893 Workshop in Health Education 1-3 s.h.
Concentrated study of a selected topic related to health education. The department will select and announce the topic and determine the credit hours based on the frequency and duration of workshop meetings. May be repeated for a maximum of 6 s.h. with change in topic.
Prereq.: PHLT 3701, PHLT 3791 or permission of instructor.

Respiratory Care
RESC 1500 Introduction to Online Learning in Health Professions 3 s.h.
Prepare students to take online courses including the use of the Blackboard learning environment and orient students to YSU and YSU's Health Professions programs. Help students acquire basic skills to be successful in online learning and emphasize skills and resources necessary to be successful in their personal, academic and career-related pursuits. In addition, this course will introduce students to topics such as career assessment and how to become a successful health professional in the 21st Century. Should be taken during a student's first 30 hours at YSU. Listed also as PHLT 1500 and AHLT 1500.
Prereq.: PHLT, AHLT or RESC major.

RESC 1503 Respiratory Procedures 1 3 s.h.
Appropriate use of selected respiratory care procedures. Three hours lecture to be taken concurrently with 1503L.

RESC 1503L Respiratory Procedures 1 Lab 1 s.h.
Appropriate use of selected respiratory care procedures. Three hours lab to be taken concurrently with 1503L.

RESC 1520 Respiratory Care Assessment 1 2 s.h.
Diagnostic techniques used in evaluating patients with cardiopulmonary disorders. Two hour lecture to be taken concurrently with RESC 1520L.
Prereq.: RESC 1531.

RESC 1520L Respiratory Assessment 1 Lab 1 s.h.
Diagnostic techniques used in evaluating patients with cardiopulmonary disorders. Two hour lab. Must be taken concurrently with RESC 1520.

RESC 1529 Respiratory Care Orientation 2 s.h.
Scope of profession including key organizations, role within health-care system and career options. Includes applied anatomy and physiology of respiratory system and basic assessment and therapeutic procedures. Hospital experiences included. One hour lecture and two hours lab.

RESC 1531 Respiratory Care Essentials 2 s.h.
Application of basic scientific principles to the respiratory-care profession. Includes coverage of basic equipment, assessment techniques, and therapeutic procedures. Two hours lecture. Must be taken concurrently with RESC 1531L.

RESC 1531L Respiratory Care Essentials Lab 1 s.h.
Application of basic scientific principles to the respiratory-care profession. Includes coverage of basic equipment, assessment techniques, and therapeutic procedures. Two hours lab. Must be taken concurrently with RESC 1531.

RESC 2620 Respiratory Assessment 2 2 s.h.
Advanced techniques in the assessment of cardiopulmonary disorders. Two hours lecture to be taken concurrently with 2620L.

RESC 2620L Respiratory Assessment 2 Lab 1 s.h.
Advanced techniques in the assessment of cardiopulmonary disorders. Two hours lab to be taken concurrently with RESC 2620.

RESC 2621 Cardiopulmonary Disease 4 s.h.
Comprehensive overview of cardiopulmonary disorders encountered by respiratory therapists. Includes applications to clinical protocols.
Prereq.: RESC 2620.

RESC 2699 Clinical Practice 1 1 s.h.
Orientation to hospital and department policies, including exposure to and practice with basic respiratory care procedures. Five hours a week in clinics.
Prereq.: RESC 2621.

RESC 3706 Respiratory Procedures 2 2 s.h.
Airway management techniques and other critical care procedures. Two hours lecture to be taken concurrently with Resc 3706L.
Prereq.: acceptance into the respiratory care program.

RESC 3706L Respiratory Procedures 2 Lab 1 s.h.
Airway management techniques and other critical care procedures. Three hours lab to be taken concurrently with RESC 3706.
Prereq.: Acceptance into the respiratory therapy program.

RESC 3708 Respiratory Clinical Specialties 2 s.h.
Fundamentals of hemodynamic monitoring, management of burn patients, and assessment of neurotrauma. Two hours lecture to be taken concurrently with RESC 3708L.
Prereq.: Acceptance into the respiratory care program and completion of RESC 3706.

RESC 3709 Neonatal/Pediatric Respiratory Care 3 s.h.
Respiratory care applications in neonatal/pediatric settings. Three hours lecture to be taken concurrently with RESC 3709L.
Prereq.: Acceptance into the Respiratory Care Program.

RESC 3709L Neonatal/Pediatric Respiratory Care Lab 1 s.h.
Respiratory care applications in neonatal/pediatric settings. Three hours lab to be taken concurrently with RESC 3709.
Prereq.: Acceptance into the Respiratory Care program.

RESC 3720 Mechanical Ventilation 1 2 s.h.
Basic theory and application of mechanical ventilation in critical care areas. Two hours lecture to be taken concurrently with RESC 3720L.
Prereq.: Acceptance into the respiratory care program.

RESC 3720L Mechanical Ventilation 1 Lab 1 s.h.
Basic theory and application of mechanical ventilation in critical care areas. Three hours lab to be taken concurrently with RESC 3720.
Prereq.: Acceptance into the Respiratory Care Program.

RESC 3725 Mechanical Ventilation 2 2 s.h.
Advanced theory and application of mechanical ventilation. Includes home care ventilators. Two hours lecture to be taken concurrently with RESC 3720L.
Prereq.: RESC 3720.

RESC 3725L Mechanical Ventilation 2 Lab 1 s.h.
Advanced theory and application of mechanical ventilation. Includes home care ventilators. Three hours lab to be taken concurrently with RESC 3725.
Prereq.: RESC 3720.

RESC 3731 Respiratory Care Management 3 s.h.
A study of the basic managerial process, organizational concepts, budgeting, quantitative planning, decision-making, and issues of control as they relate to the manager of a hospital-based respiratory care department.
Prereq.: RESC 3725.

RESC 3740 Clinical Practice 2 2 s.h.
Application of basic and advanced respiratory care modalities. Twenty clinical hours per week to be taken concurrently with RESC 3740L.
Prereq.: RESC 2699.

RESC 3740L Clinical Practice 2 Lab 1 s.h.
Application of basic and advanced respiratory care modalities. Three hour lab to be taken concurrently with RESC 3740.
Prereq.: RESC 2699.

RESC 3741 Clinical Practice 3 3 s.h.
Application of basic and advanced respiratory care modalities for pediatric and adult patients. Twenty hours a week.
Prereq.: RESC 3740.
RESC 3750  Pulmonary Rehabilitation  2 s.h.
Demonstration of the multidisciplinary nature of a pulmonary rehabilitation
program. The role of the respiratory care practitioner in preventive care
activities.
Prereq.: RESC 3706.

RESC 3765  Advanced Respiratory Care Diagnostics  3 s.h.
The study of the fundamentals of advanced respiratory care diagnostics. Three
hours lecture.
Prereq.: RESC 3708 or permission of instructor.

RESC 4801  Special Topics in Respiratory Care  1-3 s.h.
Focused research of a special problem/issue related to respiratory care. The
topic of interest allows the student to participate in focused investigation of
aspects of administration, clinical specialization, or research. May be repeated
up to a total of 3 s.h.
Prereq.: acceptance in BSRC completion program, junior standing, or
permission of instructor.

RESC 4801A  Special Topics in Respiratory Care Clinical Sleep 1  1-3 s.h.
Focused research of a special problem/issue related to respiratory care. The
topic of interest allows the student to participate in focused investigation of
aspects of administration, clinical specialization, or research. May be repeated
up to a total of 3 s.h.
Prereq.: acceptance in BSRC completion program, junior standing, or
permission of instructor.

RESC 4801B  Special Topics in Respiratory Care Sleep Clinical 2  1-3 s.h.
Focused research of a special problem/issue related to respiratory care. The
topic of interest allows the student to participate in focused investigation of
aspects of administration, clinical specialization, or research. May be repeated
up to a total of 3 s.h.
Prereq.: acceptance in BSRC completion program, junior standing, or
permission of instructor.

RESC 4810  Advanced Neonatal and Pediatric Case Management  3 s.h.
This course is designed to strengthen the student’s knowledge of Neonatal/
Pediatric disorders by incorporating evidence-based practices into case
management. Current protocols will also be discussed.
Prereq.: acceptance in BSRC completion program, junior standing, or
permission of instructor.

RESC 4831  Pulmonary Care Management  3 s.h.
Pathology as it relates to care of patients with pulmonary-related disorders.
Prereq.: RESC 3725.

RESC 4835  Clinical Practice 4  3 s.h.
Application of advanced respiratory modalities and diagnostics for pediatric
and adult patients. Capstone course for RC program. Fifteen hours a week.
Prereq.: RESC 3741.

RESC 4838  Respiratory Seminar 1  1 s.h.
Review of current aspects of clinical respiratory care. A content analysis of the
updated NBRC Entry-Level exam will be included.
Prereq.: RESC 3741.

RESC 4842  Respiratory Seminar 2  1 s.h.
Review of current aspects of clinical respiratory care. A content analysis of the
updated NBRC Advanced Practitioner exam will be included.
Prereq.: RESC 4838.

RESC 4846  Sleep Diagnostics 1  3 s.h.
Scientific theory and clinical techniques needed to perform polysomnography.
Three hours lecture.
Prereq.: Respiratory therapy major or by special permit.

RESC 4847  Sleep Clinics 1  1 s.h.
Polysonomographic techniques in the clinical setting. Approximately 80 contact
hours for each course.
Prereq.: Senior standing and RESC 4846.

RESC 4848  Sleep Diagnostics 2  3 s.h.
Scientific theory and clinical techniques needed to perform polysomnography.
Three hours lecture.
Prereq.: Respiratory major and by special permit and prior completion of
RESC 4846.

RESC 4849  Sleep Clinics 2  1 s.h.
Polysonomographic techniques in the clinical setting. Approximately 80 contact
hours for each course.
Prereq.: Senior standing and RESC 4848 and RESC 4847.

RESC 4860  Advanced Management of the Ventilator Patient  3 s.h.
Course will present current classifications, evidence-based research and
application of mechanical ventilator concepts in critical care areas. Technical
capabilities of modes will be described along with optimal settings. Current
protocols in RC will also be discussed.
Prereq.: acceptance in BSRC completion program, junior standing, or
permission of instructor.

RESC 4862  Professional Pathways for Respiratory Care Practitioners  3 s.h.
This course will explore select professional pathways available to the RCP.
The foundations and role of the RCP are examined in four key areas: the sleep
center, home care, PFT lab and HBO centers. The RCP will be introduced to the
standards of care and practical application for each area.
Prereq.: acceptance in BSRC completion program, junior standing, or
permission of instructor.

RESC 4867  Fundamentals of Leader Development  3 s.h.
This course will form the necessary core of self-awareness in relation to leader
development. Through introducing concepts and examples of leadership
awareness of how one leads as an expression of self, RCPs will enhance
leadership awareness and personal expression within their discipline.
Prereq.: acceptance in BSRC completion program, junior standing, or
permission of instructor.

RESC 4870  Advanced Cardiopulmonary Case Management  3 s.h.
This course is designed to strengthen the student’s knowledge of C-
P disorders by incorporating evidence-based practices into C-P case
management. The student will learn to apply these strategies in acute care,
transitional and long-term care settings. Current protocols will also be
discussed.
Prereq.: acceptance in BSRC completion program, junior standing, or
permission of instructor.

RESC 4872  Technology Applications for RCPs  3 s.h.
Exploration of technology applications for education, presentations,
communications and management. Creation of digital media such as audio and/or
video files, e-portfolios and web-based application of various
applications will be required. Application of technology to education or
management will be evaluated through completions of a technology-enhanced
project.
Prereq.: acceptance in BSRC completion program, junior standing, or
permission of instructor.

Associate of Applied Science in Emergency Medical Services
Program Director: Susan Kearns  330-941-1426  sekearns@ysu.edu
Emergency medical services programs are designed to educate persons to
provide emergency prehospital care to people experiencing health crises. The
goals of these programs are on three different levels:
• emergency medical technician
• paramedic certification
• Associate of Applied Science degree

The emergency medical technician course follows the Department of
Transportation’s national emergency medical services education standards,
meeting all the knowledge requirements for entry-level emergency medical
technician certification. To be eligible for the National Registry of Emergency
Medical Technicians’ certifying examination at the EMT level, the student must:

- Receive a grade of C or greater in:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
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<tbody>
<tr>
<td>EMS 1500</td>
<td>Emergency Medical Technician</td>
<td>4</td>
</tr>
<tr>
<td>EMS 1500L</td>
<td>Emergency Medical Technician Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>EMS 1500C</td>
<td>Emergency Medical Technician Clinical and Field Internship</td>
<td>1</td>
</tr>
</tbody>
</table>

- Successfully complete the field internship objectives

The Emergency Medical Technician Paramedic Certificate can be attained after successfully completing four semesters of study. The course of study provides the student with knowledge about the recognition, assessment, and practice of emergency medical care in the pre-hospital setting on an advanced life-support unit. It meets and exceeds all U.S. Department of Transportation national emergency medical services education standards. The Youngstown State University emergency medical services program is accredited by:

The Commission on Accreditation of Allied Health Education Programs
http://www.caahed.org
25400 U.S. Highway 19 North, Suite 158
Clearwater, FL 33763
(727) 210-2350

Up on the recommendations of:

The Committee on Accreditation of Educational Programs for the EMS Professions
http://www.coaemsp.org
CoAEMSP [600045]
8301 Lakeview Parkway Suite 111-312
Rowlett, TX 75088
(214) 703-8445
fax (214) 703-8992

and

The Ohio Department of Public Safety Division of Emergency Medical Services
1970 West Broad Street
Columbus, OH 43223
http://www.ems.ohio.gov
[ODPS #333]
(614) 466-9447
fax (614) 466-9461

The last reaccreditation site visit occurred on March 3 & 4, 2016, which resulted in continuing accreditation. The next reaccreditation visit is expected to occur in March 2021. The graduates of the paramedic program over the last three years have had a 96% pass rate on the National Registry of EMTs Paramedic examination.

The Associate of Applied Science degree is awarded following the completion of the advanced training program with clinical paramedical experiences. This program includes coursework for critical care paramedicine and multi-skilled EMS practitioner. Thirty percent of all teaching and clinical rotations are physician-instructed and/or precepted. To obtain the Associate of Applied Science degree (including the Emergency Medical Technician Certificate and the Paramedic Certificate), will require six semesters of study including two summer semesters.

For the certificate, admission requirements and procedures are the same as those applicable to the University and the Department of Health Professions with the addition of a minimum age of 18 years, and a current driver’s license or state-issued I.D. The student must be Ohio EMT certified prior to being accepted into the paramedic program. (BIOL 1545 Allied Health Anatomy and Physiology) or the equivalent is a required prerequisite for admission into the paramedic program. A physical examination to attest to good health, finger printing, and a criminal background check are required. Drug testing may be required by the clinical or field internship site. Admission into the Associate of Applied Science degree program is restricted. Please refer to the admission policies available from the Department of Health Professions.

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Semester</th>
<th>S.H.</th>
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<tbody>
<tr>
<td>Summer</td>
<td>BIOL 1545 &amp; 1545L</td>
<td>Allied Health Anatomy and Physiology Laboratory</td>
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<td>Fall</td>
<td>YSU 1500</td>
<td>Success Seminar</td>
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<tr>
<td></td>
<td>EMS 1501</td>
<td>Introduction to Prehospital Medicine</td>
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<td>EMS 1502</td>
<td>General Pathophysiology for the Paramedic</td>
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<td>EMS 1503</td>
<td>Patient Assessment and Airway Management</td>
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<td>EMS 1504</td>
<td>Principles of Trauma</td>
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<td></td>
<td>EMS 1505</td>
<td>Emergency Medical Techniques 1 Lab</td>
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<td></td>
<td>EMS 1506</td>
<td>Emergency Medical Services Clinical 1</td>
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<td>MATC 1501</td>
<td>Medical Terminology</td>
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</table>

Semester Hours | 16

| Spring | EMS 1507 | Cardiovascular Emergencies | 3 |
|        | EMS 1508 | Cardiovascular Techniques Lab | 1 |
|        | EMS 1512 | Medical Conditions and Management Techniques | 3 |
|        | EMS 1513 | Emergency Medical Techniques 2 Lab | 1 |
|        | EMS 1514 | Emergency Medical Services Operations | 1 |
|        | EMS 1515 | Clinical Experience 2 | 1 |
|        | EMS 1516 | Prehospital Field Experience 1 | 1 |
|        | PSYC 1560 | General Psychology | 3 |

Semester Hours | 14

<table>
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<tr>
<th>Year 2</th>
<th>Semester</th>
<th>S.H.</th>
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<tbody>
<tr>
<td>Summer</td>
<td>EMS 2600</td>
<td>Emergency Medical Services Special Populations</td>
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<td>EMS 2601</td>
<td>Emergency Medical Techniques 3 Lab</td>
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<td></td>
<td>EMS 2603</td>
<td>Clinical Experience 3</td>
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<td></td>
<td>EMS 2604</td>
<td>Prehospital Field Experience 2</td>
</tr>
<tr>
<td></td>
<td>EMS 2605</td>
<td>Pulmonary Emergencies</td>
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</table>

Semester Hours | 10

| Fall   | EMS 2606 | EMS Special Certifications | 1 |
|        | EMS 2607 | EMS Special Certifications Lab | 1 |
|        | EMS 2609 | EMS Prehospital Field Internship | 3 |
|        | ENGL 1550 | Writing | 1 |
|        | SOC 1500 | Introduction to Sociology | 3 |
|        | CHEM 1505 & 1505L | Allied Health Chemistry 1 and Allied Health Chemistry 1 Laboratory | 3 |

Completion of Paramedic Certificate - 46 s.h.
(ENGL 1550, SOC 1500, CHEM 1505, and CHEM 1505L are not required for the certificate)

Semester Hours | 14

| Spring  | EMS 2613 | Critical Care Paramedic | 3 |
|         | EMS 2614 | Critical Care Paramedic Laboratory | 1 |
|         | EMS 2631 | Advanced Clinical and Field Internship Experience | 2 |
Applicants must have a State of Ohio EMT certification (completion of EMS 1500, EMS 1500L, and EMS 1500C or equivalent). A grade of C or greater is required for all EMS, PSYC, and MATC courses.

Learning Outcomes

Graduates in the paramedic program will:

- Demonstrate the ability to comprehend, apply, and evaluate clinical information relevant to their role as a paramedic (cognitive).
- Demonstrate technical proficiency in all skills necessary to fulfill the role as a paramedic (psychomotor).
- Demonstrate personal behavior consistent with professional and employer expectations for the paramedic (affective).

Associate of Applied Science in Medical Laboratory Technician

Medical Laboratory Programs

Laboratory analysis plays an important role in the detection, diagnosis, and treatment of many diseases. Laboratory professionals perform a myriad of such tests to aid the physician in the management of disease.

For more information regarding program policies, procedures, and essential functions or to obtain a copy of the Medical Laboratory program handbook, please contact Joan O’Connell-Spalla at (330) 941-1761 or joconnellspalla@ysu.edu.

Medical Laboratory Technician (MLT-AAS) Curriculum

The medical laboratory technician program is a two-year program leading to the Associate of Applied Science degree. The curriculum focuses on the knowledge and basic skills necessary to understand and master the procedures performed in the medical laboratory. Included are the principles, methods, calculations, and interpretation of laboratory procedures, computer technology, and communication and interpersonal skills. Technical instruction includes procedures in hematology, microbiology, immunohematology, clinical chemistry, and body fluids. This program requires five semesters of study including one summer semester.

Medical laboratory technicians (MLT) work in a supportive role in a hospital laboratory, private laboratory, clinic, public health facility, or pharmaceutical laboratory. The MLT performs laboratory tests under the supervision of pathologists and other physicians, and clinical laboratory scientists. Physicians and other health care professionals use these tests to determine the presence and extent of disease, the etiologic implications about the cause of disease, and to monitor the treatment of the disease.

The MLT collects samples from patients and develops data on the blood, tissues and body fluids by using a variety of precise methodologies and technologies. Medical laboratory technicians use modern instruments, with the ability to discriminate between similar items and correct errors using preset strategies. The MLT has knowledge of specific techniques and instrumentation and is able to recognize factors that affect laboratory procedures. The MLT also monitors quality assurance procedures.
<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
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<tr>
<td><strong>FIRST YEAR REQUIREMENT - STUDENT SUCCESS</strong></td>
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<tr>
<td>YSU 1500</td>
<td>Success Seminar</td>
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<td>or SS 1500</td>
<td>Strong Start Success Seminar</td>
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<tr>
<td>or HONR 1500</td>
<td>Intro to Honors</td>
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<td><strong>General Education</strong></td>
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<tr>
<td>ENGL 1550</td>
<td>Writing 1</td>
<td>3-4</td>
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<tr>
<td>or ENGL 1549</td>
<td>Writing 1 with Support</td>
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<tr>
<td>ENGL 1551</td>
<td>Writing 2</td>
<td>3</td>
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<tr>
<td>STAT 2625</td>
<td>Statistical Literacy and Critical Reasoning</td>
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<td>Select 2 courses from 2 domains: Natural Sciences (one must include a lab), Social Science, A&amp;H</td>
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<td><strong>Science Requirements</strong></td>
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<tr>
<td>BIOL 2601</td>
<td>General Biology: Molecules and Cells</td>
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<td>&amp; 2601L &amp; 2602L</td>
<td>General Biology: Molecules and Cells Laboratory</td>
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<tr>
<td>BIOL 2602</td>
<td>General Biology: Organisms and Ecology</td>
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<td>CHEM 1515</td>
<td>General Chemistry 1</td>
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<td>&amp; 1515L &amp; 1515L</td>
<td>General Chemistry 1 Laboratory</td>
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<td><strong>Major Requirements</strong></td>
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<tr>
<td>MLT 1501</td>
<td>Introduction to the Medical Laboratory Profession</td>
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<tr>
<td>MLT 1501L</td>
<td>Introduction to the Medical Laboratory Profession Laboratory</td>
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<tr>
<td>MLT 1502</td>
<td>Urinalysis and Body Fluids</td>
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<td>MLT 1502L</td>
<td>Urinalysis and Body Fluids Laboratory</td>
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<td>MLT 1503</td>
<td>Immunohematology</td>
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<td>Immunohematology Laboratory</td>
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<td>MLT 2601</td>
<td>Clinical Chemistry 1</td>
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<td>MLT 2601L</td>
<td>Clinical Chemistry 1 Laboratory</td>
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<tr>
<td>MLT 2603</td>
<td>Topics in Medical Laboratory Technology</td>
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<tr>
<td>MLT 3700</td>
<td>Clinical Chemistry 2</td>
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<td>MLT 3700L</td>
<td>Clinical Chemistry 2 Laboratory</td>
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<tr>
<td>MLT 3701</td>
<td>Clinical Hematology 1</td>
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<td>Clinical Hematology 1 Laboratory</td>
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<td>MLT 3702</td>
<td>Clinical Hematology 2</td>
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<td>MLT 3703</td>
<td>Clinical Immunology Laboratory</td>
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<td>MLT 3703L</td>
<td>Clinical Immunology Laboratory</td>
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<td>MLT 3787</td>
<td>Diagnostic Microbiology</td>
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<td>MLT 3787L</td>
<td>Diagnostic Microbiology Laboratory</td>
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<td>MLT 3706</td>
<td>Medical Laboratory Seminar</td>
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<td>MLT 3710</td>
<td>Interpretation of Clinical Laboratory Results</td>
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<td>MLT 3716</td>
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<th>Year 1</th>
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<tr>
<td>YSU 1500</td>
<td>Success Seminar</td>
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<td>MLT 1501   &amp; 1501L</td>
<td>Introduction to the Medical Laboratory Profession and Introduction to the Medical Laboratory Profession Laboratory</td>
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<tr>
<td>CHEM 1515   &amp; 1515L</td>
<td>General Chemistry 1 and General Chemistry 1 Laboratory</td>
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<td>General Biology: Molecules and Cells and General Biology: Molecules and Cells Laboratory</td>
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<td>ENGL 1550</td>
<td>Writing 1</td>
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<th>General Education Requirement</th>
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<td>Spring</td>
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<tr>
<td>MLT 1502 &amp; 1502L</td>
<td>Urinalysis and Body Fluids and Urinalysis and Body Fluids Laboratory</td>
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<td>Immunohematology and Immunohematology Laboratory</td>
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<td>Clinical Chemistry 1 and Clinical Chemistry 1 Laboratory</td>
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<td>ENGL 1551</td>
<td>Writing 2</td>
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<td>MLT 3701 &amp; 3701L</td>
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<th>Semester Hours</th>
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<td>MLT 2603</td>
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<td>MLT 3702 &amp; 3702L</td>
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<td>Statistical Literacy and Critical Reasoning</td>
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<td>Interpretation of Clinical Laboratory Results</td>
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<td>MLT 3716</td>
<td>Clinical Internship</td>
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**Total Semester Hours** 73

1 General education courses must fulfill them requirements for the baccalaureate degree. Students must take two courses from Arts & Humanities, two courses from Social Science, and two courses from Social and Personal Awareness.

Only those students who complete MLT 1501 Introduction to the Medical Laboratory Profession / MLT 1501L Introduction to the Medical Laboratory Profession Laboratory and BIOL 2601 General Biology: Molecules and Cells / BIOL 2601L General Biology: Molecules and Cells Laboratory with a grade of C or better will be considered for admission into the MLT Program.

### Learning Outcomes

- Graduates will be prepared to function as entry-level health care professionals in the medical laboratory as medical laboratory technicians and medical laboratory scientists. At entry level, the medical laboratory graduate will be able to demonstrate the ability to comprehend, apply and evaluate information relative to the medical laboratory profession.

- These learning outcomes include comprehension of the theory and the ability to apply and evaluate the didactics of hematology, clinical chemistry, immunohematology, microbiology, immunology, coagulation, molecular diagnostics, and other emerging diagnostics.

- Graduates will be prepared to function as entry-level health care professionals in the medical laboratory as medical laboratory technicians
and medical laboratory scientists. Upon completion of the program, graduates will demonstrate technical proficiency in laboratory applications.

- These psychomotor learning outcomes include the performance of laboratory procedures in hematology, clinical chemistry, immunohematology, microbiology, immunology, coagulation, molecular diagnostics, and other emerging diagnostics. The graduate will demonstrate proficiency in the functions of all phases of laboratory analysis (pre-analytical, analytical, and post-analytical processes).
- Graduates will demonstrate professional conduct and interpersonal communication skills consistent with the medical laboratory profession.
- Students will exhibit the ability to think critically across all 3700-level courses through the application of fundamental didactic and psychomotor skills to assess the medical relevance and significance of specific aspects of laboratory testing.

Bachelor of Science in Applied Science in Allied Health Completion Program

Program Director
Dr. Sylvia Stefan
(330) 941-7157
sastefan@ysu.edu

Overview
Grads with an associate degree in dental hygiene, emergency medical services, respiratory care, medical assisting technology, medical laboratory technology, or in any medical/health related discipline (for example, radiological technology, physical therapy assistant, or dietetics) will be admitted to the BSAS in allied health program as juniors.

Graduates of non-accredited or diploma-based programs will be admitted provisionally and placed at a level determined by an evaluation of their program academic transcripts.

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<tr>
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<td>or SS 1500</td>
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<td>or HONR 1500</td>
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General Education Requirements

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<td>or ENGL 1549</td>
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<td>ENGL 1551</td>
<td>Writing 2</td>
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<td>CMST 1545</td>
<td>Communication Foundations</td>
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Mathematics Requirement

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<td>or STAT 2625</td>
<td>Stat Lit and Crit Reasoning</td>
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Arts and Humanities (6 s.h.)

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<td>Natural Sciences (2 courses, 1 with lab) (7 s.h.)</td>
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<tr>
<td>Social Science (6 s.h.)</td>
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<td>Social and Personal Awareness (6 s.h.)</td>
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Major Requirements

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<td>AHLT 3704</td>
<td>Quantitative Methods in Health Sciences</td>
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<tr>
<td>AHLT 3708</td>
<td>Preventive Public Health Care</td>
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<td>AHLT 3711</td>
<td>Health Care Information Systems</td>
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<td>AHLT 4806</td>
<td>Research Methods</td>
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<tr>
<td>AHLT 4810</td>
<td>Management Skills for Health Professionals</td>
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Allied Health Electives
Select 6 s.h. from the following:

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<tr>
<td>AHLT 3705</td>
<td>Pharmacotherapeutics</td>
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<tr>
<td>AHLT 3707</td>
<td>Clinical Informatics for the Healthcare Provider</td>
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<tr>
<td>AHLT 3709</td>
<td>Elements of Urban Environmental Health Practices</td>
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<tr>
<td>AHLT 3740</td>
<td>Pathology of Infectious Diseases</td>
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<tr>
<td>AHLT 3755</td>
<td>Principles of Occupational Health and Safety</td>
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<td>AHLT 4801</td>
<td>Special Topics</td>
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<tr>
<td>AHLT 4804</td>
<td>Stress and the Health Care Professional</td>
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<td>AHLT 4805</td>
<td>Health Education for Allied Health</td>
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<tr>
<td>AHLT 4808</td>
<td>Environmental Health Concerns</td>
<td>3</td>
</tr>
<tr>
<td>AHLT 5831</td>
<td>Industrial Hygiene</td>
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<tr>
<td>AHLT 5816</td>
<td>Environmental Regulations</td>
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Select 39 s.h. of 3700 or higher upper division courses.

Minor (Optional) and Electives to reach 120 hours

Total Semester Hours 120-124

Pre-admission counseling is required for students seeking entry to the BSAS in Allied Health. For greater detail on program content or admissions, students should contact the Department of Health Professions.

Learning Outcomes

The student learning outcomes for the major in allied health are as follows:

- Students will conduct a quantitative, qualitative, or mixed method research project involving data collection and analysis.
- Students will utilize current technologies such as computer and online systems/services to access and communicate information.
- Students will be able to analyze health care-related issues.
- Students will demonstrate effective written and verbal communication skills.

Bachelor of Science in Applied Science in Food and Nutrition Coordinated Program in Dietetics (Registration Eligible)

Dr. Jeanine Mincher
(330) 941-3346
jmincher@ysu.edu

The Coordinated Program in Dietetics (CPD) is an upper-division generalist dietetics program with an emphasis in community wellness. The program prepares students for professional practice and establishes eligibility for graduates to sit for the examination to become Registered Dietitians (RD) and Licensed Dietitians in the state of Ohio. During the five-semester program, each student spends a minimum of 1,200 supervised practice hours covering medical nutrition therapy, community nutrition and wellness, maternal and child, foodservice, and aging.

A community wellness emphasis has been identified as a need in the regional area that Youngstown State University serves. Graduates of the coordinated program in dietetics will be positioned to assume major roles in community health programs. The program is currently accredited through the Accreditation Council for Education in Nutrition and Dietetics (ACEND) within the Academy of Nutrition and Dietetics (AND).
Accreditation Council for Education in Nutrition and Dietetics (http://www.eatright.org/ACEND/)  
120 South Riverside Plaza, Suite 2000  
Chicago, IL 60606-6995  
(312) 899-0040 Ext. 5400

Admission to the CPD is restricted since only 12 students can be accommodated. Satisfactory completion of a minimum of 63 semester hours (to qualify for junior status) is required before the student begins the program. Detailed information regarding criteria and procedures is available from the Department of Human Ecology. Students are accepted to the CPD in spring, and start the program during fall semester. The current closing date for applications is February 15 for the following fall semester.

Upon satisfactory completion of the CPD, graduates are issued a verification statement that confirms eligibility to take the Commission on Dietetic Registration (CDR) registration examination for dietitians. CPD graduates who pass the registration examination are entitled to use the RD credential to signify professional competence.

For more information, visit Food and Nutrition Coordinated Program in Dietetics (http://www.ysu.edu/academics/bitonte-college-health-and-human-services/dietetics-programs/).

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<td>FNUT 1553</td>
<td>Food Science and Management Principles</td>
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<td>FNUT 1553L</td>
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<td>CHFM 3731</td>
<td>Individual and Family Development</td>
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<td>FNUT 3735</td>
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**Spring**

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<td>SOC 1500</td>
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**Year 2**

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<td>FNUT 1553</td>
<td>Food Science and Management Principles (F,S)</td>
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Youngstown State University Undergraduate 373
Bachelor of Science in Applied Science in Public Health, Environmental Health Track

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<td>Quantitative Reasoning or Stat Lit and Crit Reasoning</td>
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<tr>
<td>COUN 2651</td>
<td>Foundations of Helping Skills for Human Ecology Professionals</td>
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<td>FNUT 2652L</td>
<td>Nutrition Assessment Laboratory (F;S)</td>
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**Semester Hours** 16

**Fall**
- BIOL 1560 Microbiology for the Health Professions and Microbiology Laboratory for Health Professions 3
- ACCT 2602 Financial Accounting 3
- FNUT 2603 Medical Nutrition Therapy 1 (F;S) 3
- FNUT 2603L Medical Nutrition Therapy 1 Lab (F;S) 1
- FNUT 2612 & 2612L Food Systems: Operation, Production, and Service and Food Systems: Operations, Production, and Service Laboratory (F;S) 5
- FNUT 3735 Nutritional Biochemistry (S) 2

**Semester Hours** 17

**Year 3**

**Fall**
- CHFM 3731 Individual and Family Development (F;S;X) 3
- FNUT 3759 Advanced Nutrition (F) 3
- FNUT 3760 Medical Nutrition Therapy 2 (F) 3
- FNUT 3760R Medical Nutrition Therapy 2 Laboratory Recitation (F) 2
- FNUT 3760L Medical Nutrition Therapy 2 Laboratory (F) 2
- FNUT 4802 Research Methods in Dietetics (F) 2

**Semester Hours** 15

**Spring**
- MGT 3725 Fundamentals of Management 3
- FNUT 3761 Science of Nutrition in Exercise (S) 3
- FNUT 4802L Research Methods in Dietetics Laboratory (S) 1
- FNUT 4860 Medical Nutrition Therapy 3 (S) 3
- FNUT 4860L Medical Nutrition Therapy 3 Lab (S) 3
- FNUT 5862 & 5862L Food and Culture and Food and Cultures Laboratory (S) 3

**Semester Hours** 16

**Year 4**

**Fall**
- FNUT 4858 Food Service Systems Management (F) 4
- FNUT 4858L Food Systems Management Laboratory (F) 3
- FNUT 4873 Nutrition and Aging (F) 2
- FNUT 4873L Nutrition and Aging Laboratory (F) 3
- SOC 3745 or GERO 3703 Sociology of Health, Illness, and Healthcare or Aging and Society 3

**Semester Hours** 15

**Spring**
- FNUT 4810 Experimental Foods (S) 2
- FNUT 4810L Experimental Foods Laboratory (S) 1
- FNUT 4874 Community Nutrition and Wellness (F) 3
- FNUT 4874L Community Nutrition and Wellness Laboratory (F) 3
- FNUT 4872 Maternal and Child Nutrition (S) 2
- FNUT 4872L Maternal and Child Nutrition Laboratory (S) 2

**Semester Hours** 132

**Learning Outcomes**
At the completion of the coordinated program in dietetics, graduates will be able to:
- Communicate effectively.
- Effectively integrate biochemical concepts into dietetics practice.
- Effectively integrate physiological concepts into dietetics practice.
- Effectively apply theory from the social sciences to dietetics practice.
- Effectively present results of research study.
- Effectively apply concepts from food, nutrition, management, and health care systems to dietetics practice.
- Practice effectively as members of an interdisciplinary team.
- Demonstrate competency in medical nutrition therapy.
- Demonstrate competency in foodservice management practice.
- Demonstrate competency in community nutrition practice.

Bachelor of Science in Applied Science in Public Health, Environmental Health Track

**Program Director**
Dr. Nicolette Powe
(330) 941-1895
nwpowe@ysu.edu

**Overview**

**Public Health**
The public health program offers the Bachelor of Science in Applied Science (BSAS) degree and can be completed in eight semesters if students average 16 hours per semester. The program has two tracks:
- Health Education/Health Promotion
- Environmental Health and Safety

The program offers a minor in public health and community health planning and evaluation. The program offers minors in:
- Public health
- Community Health Planning and Evaluation
- Environmental Health and Safety

The program contributes to the University's general education requirements by offering PHLT 1500 Introduction to Online Learning in Health Professions, PHLT 1513 Introduction to Environmental Health and Safety, PHLT 1531 Fundamentals of Public Health, and PHLT 1568 Healthy Lifestyles, which meet the general education requirements for First Year Experience, Social and Personal Awareness, Social Sciences/Social and Personal Awareness and Social and Personal Awareness, respectively. To be admitted to the public health program, a student must have a minimum GPA of 2.0. To continue enrollment in the major, students must maintain a 2.0 GPA. If a student falls...
below a 2.0 GPA, he or she can only reapply to the major after a minimum GPA of 2.0 has been achieved.

There are five standard areas in public health training that enable students to perform the essential services of public health. These are:

- epidemiology
- biostatistics
- health services administration
- environmental health
- behavioral science/health education

The curriculum for the YSU bachelor's degree in public health addresses each of the five core areas through multiple courses. This curriculum enables mastery at the bachelor's level of the nationally recognized Public Health Core Competencies, and requires an internship tailored to the area of public health interests of each student. All of the major courses for the degree can be completed through online distance learning options.

The BSAS in public health can also prepare the student to become a Certified Health Education Specialist (CHES) or be eligible to take the sanitaryian examination. CHES assesses:

- individual and community health needs
- the ability to plan and implement effective health education and health promotion programs
- the ability to coordinate and manage the provision of health education and promotion services
- the ability to effectively communicate health and health education needs, concerns, and resources
- the ability to conduct program evaluation

The environmental health and safety track prepares students to be sanitarians/sanitarians-in-training. Sanitarians promote public health by conducting environmental health inspections and related activities for settings such as food service establishments (restaurants), children’s camps, hotels, long-term and adult care facilities, and diagnostic and treatment centers.

Public health professionals work in multiple settings:

- public
- non-profit
- academic
- private
- governmental

For more information visit the Public Health Program (http://www.ysu.edu/academics/bitonte-college-health-and-human-services/online-public-health-major/).

During the freshman and sophomore years, students are expected to take the courses that meet the requirements for general education. In addition to the English, mathematics, and communication requirement, specific general education courses for the BSAS public health degree include:

<table>
<thead>
<tr>
<th>COURSE</th>
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<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>YSU 1500</td>
<td>Success Seminar</td>
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</tr>
<tr>
<td>or SS 1500</td>
<td>Strong Start Success Seminar</td>
<td></td>
</tr>
<tr>
<td>or HONR 1500</td>
<td>Intro to Honors</td>
<td></td>
</tr>
</tbody>
</table>

**General Education Requirements**

| ENGL 1550 | Writing 1                                  | 3-4  |
| or ENGL 1549 | Writing 1 with Support                  |      |
| ENGL 1551 | Writing 2                                  | 3    |
| CMST 1545 | Communication Foundations                 | 3    |
| MATH 2623 | Quantitative Reasoning                    | 3    |

**Major Requirements**

| PHIL 1560 | Introduction to Philosophy (fulfills major requirement) | 3    |
| or PHIL 2625 | Introduction to Professional Ethics        |      |
| One additional Arts and Humanities course | 3    |
| BIOL 2601 | General Biology: Molecules and Cells (required for major) | 4    |
| BIOL 2601L | General Biology: Molecules and Cells Laboratory (required for major) | 0    |
| One additional Natural Sciences course | 3    |
| GEOL 1500 | Environmental Geology                      | 3    |
| SOC 1500 | Introduction to Sociology (required for major) | 3    |
| PHLT 1568 | Healthy Lifestyles (required for major)    | 3    |
| PHLT 1531 | Fundamentals of Public Health (required for major) | 3    |
| PHLT 1500 | Introduction to Online Learning in Health Professions | 3    |

**Core Requirements**

| PHLT 2607 | Ethical Issues in Public Health          | 3    |
| PHLT 3702 | Health Education Theory and Methods      | 3    |
| PHLT 3709 | Elements of Urban Environmental Health Practices | 3    |
| PHLT 3725 | Topics in Public Health                  | 3    |
| PHLT 3757 | Health and Disease                       | 4    |
| PHLT 3791 | Community Health                         | 3    |
| PHLT 4826 | Community Health Planning and Promotion  | 4    |
| PHLT 4827 | Evaluation of Health Promotion Programs  | 3    |
| PHLT 4828 | Grant Writing                            | 3    |
| PHLT 4892 | Environmental Health and Safety Internship | 8    |
| PHLT 4898 | Environmental Health and Safety Senior Seminar | 3    |
| PHLT 5804 | Multicultural Health                     | 3    |
| PHLT 5810 | Agents of Mass Casualty                  | 3    |
| PHLT 5812 | Crisis Management in Public Health       | 3    |
| AHLT 3708 | Preventive Public Health Care            | 3    |
| AHLT 3740 | Pathology of Infectious Diseases         | 3    |
| AHLT 3755 | Principles of Occupational Health and Safety | 3    |
| AHLT 4806 | Research Methods                         | 3    |
| AHLT 4808 | Environmental Health Concerns            | 3    |
| AHLT 4810 | Management Skills for Health Professionals | 3    |
| AHLT 4820 | Directed Research                        | 3    |
| AHLT 5816 | Environmental Regulations                | 3    |
| AHLT 5807 | Epidemiology                             | 3    |
| AHLT 5831 | Industrial Hygiene                       | 3    |

**Total Semester Hours** 128-130

A total of 122 semester hours are required for the BSAS in public health. No minor is required for this professional BSAS degree.

### Year 1

**Fall**

| YSU 1500 | Success Seminar | 1 |
| PHLT 1531 | Fundamentals of Public Health | 3 |
| PHLT 1568 | Healthy Lifestyles | 3 |
| PHLT 1513 | Introduction to Environmental Health and Safety | 3 |
| ENGL 1550 | Writing 1 | 3 |

**S.H.**
Bachelor of Science in Applied Science in Public Health, Health Promotion/Health Protection Track

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Semester Hours</th>
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<tbody>
<tr>
<td>PHLT 1500</td>
<td>Introduction to Online Learning in Health Professions</td>
<td>3</td>
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</tbody>
</table>

Spring
- MATH 2623  | Quantitative Reasoning                           | 3              |
- PHLT 3791  | Community Health                                 | 3              |
- AHLT 3708  | Preventive Public Health Care                    | 3              |
- ENGL 1551  | Writing 2                                        | 3              |
- BIOL 1545  | Allied Health Anatomy and Physiology             | 5              |
- BIOL 1545L | Allied Health Anatomy and Physiology Laboratory  | 0              |

Year 2
- Fall
- AHLT 5807 | Epidemiology                                     | 3              |
- PHLT 3702  | Health Education Theory and Methods              | 3              |
- PHLT 3709  | Elements of Urban Environmental Health Practices | 3              |
- BIOL 2601  | General Biology: Molecules and Cells             | 4              |
- CMST 1545  | Communication Foundations                        | 3              |

Spring
- PHLT 3725  | Topics in Public Health                          | 3              |
- PHLT 3757  | Health and Disease                               | 4              |
- AHLT 4808  | Environmental Health Concerns                    | 3              |
- PHLT 5812  | Crisis Management in Public Health               | 3              |
- PHIL 1560  | Introduction to Philosophy                       | 3              |

Year 3
- Fall
- PHLT 4826  | Community Health Planning and Promotion          | 4              |
- AHLT 5831  | Industrial Hygiene                               | 3              |
- AHLT 4806  | Research Methods                                 | 3              |
- PHIL 2607  | Ethical Issues in Public Health                  | 3              |
- SOC 1500   | Introduction to Sociology                        | 3              |

Spring
- PHLT 4827  | Evaluation of Health Promotion Programs          | 3              |
- PHLT 4828  | Grant Writing                                    | 3              |
- AHLT 3740  | Pathology of Infectious Diseases                 | 3              |
- Arts and Humanities |                                  | 3              |
- PHLT 5804  | Multicultural Health                             | 3              |

Year 4
- Fall
- AHLT 5816  | Environmental Regulations                        | 3              |
- AHLT 3755  | Principles of Occupational Health and Safety     | 3              |
- AHLT 4810  | Management Skills for Health Professionals       | 3              |
- PHLT 5810  | Agents of Mass Casualty                          | 3              |

Learning Outcomes

The student learning outcomes for public health are as follows:

- The public health student will demonstrate skill in competence in core Public Health content including program planning and evaluation, program implementation, coordination of effective communication, use of resources, environmental health and safety, and cultural competence by achieving a score of at least 85% on a program comprehensive exam taken as part of PHLT 4898 Environmental Health and Safety Senior Seminar or PHLT 4899 Public Health Senior Seminar courses.
- The public health student will demonstrate mastery of entry-level Public Health competency by receiving an internship score of at least 85% by his/her public health/environmental health internship supervisor.

Bachelor of Science in Applied Science in Public Health, Health Promotion/Health Protection Track

Program Director
Dr. Nicolette Powe
(330) 941-1895
nwpowe@ysu.edu

Overview
Public Health

The public health program offers the Bachelor of Science in Applied Science (BSAS) degree and can be completed in eight semesters if students average 16 hours per semester. The program has two tracks:
- Health Education/Health Promotion
- Environmental Health and Safety

The program offers a minor in public health and community health planning and evaluation. The program offers minors in:

- The following development courses do not count toward degree requirements:
  - ENGL 1539 Fundamentals of College Writing 4
  - ENGL 1540 Introduction to College Writing 3
  - RSS 1510A Advanced College Success Skills 3
  - RSS 1510B Basic College Success Skills 3
  - MATH 1501 5

- No minor is required for this major.
- To continue enrollment in the major, a GPA of 2.0 must be maintained.
- Courses in the major require a grade of “C” or better.
- Courses taken under the Credit (CR)/No Credit (NC) option may not be counted toward the major. You must confer with Dr. Robinson prior to electing this option. (Refer to the Undergraduate Bulletin for more information.)
• public health
• community health planning and evaluation
• environmental health and safety

The program contributes to the University’s general education requirements by offering PHLT 1500 Introduction to Online Learning in Health Professions, PHLT 1513 Introduction to Environmental Health and Safety, PHLT 1551 Fundamentals of Public Health, and PHLT 1568 Healthy Lifestyles, which meet the general education requirements for First Year Experience, Social and Personal Awareness, Social Sciences/Social and Personal Awareness and Social and Personal Awareness, respectively. To be admitted to the public health program, a student must have a minimum GPA of 2.0. To continue enrollment in the major, students must maintain a 2.0 GPA. If a student falls below a 2.0 GPA, he or she can only reapply to the major after a minimum GPA of 2.0 has been achieved.

There are five standard areas in public health training that enable students to perform the essential services of public health. These are:

• epidemiology
• biostatistics
• health services administration
• environmental health
• behavioral science/health education

The curriculum for the YSU bachelor’s degree in public health addresses each of the five core areas through multiple courses. This curriculum enables mastery at the bachelor’s level of the nationally recognized Public Health Core Competencies, and requires an internship tailored to the area of public health interests of each student. All of the major courses for the degree can be completed through online distance learning options.

The BSAS in public health can also prepare the student to become a Certified Health Education Specialist (CHES). CHES assess:

• individual and community health needs
• the ability to plan and implement effective health education and health promotion programs
• the ability to coordinate and manage the provision of health education and promotion services
• the ability to effectively communicate health and health education needs, concerns, and resources
• the ability to conduct program evaluation

Public health professionals work in multiple settings: public health agencies, non-profit organizations, academic, private, and other health care settings.

For more information, visit the Public Health Program (http://catalog.ysu.edu/undergraduate/colleges-programs/college-health-human-services/department-health-professions/public-health-health-education-health-protection-track/).

During the freshman and sophomore years, students are expected to take the courses that meet the requirements for general education. In addition to the English, mathematics, and communication requirement, specific general education courses for the BSAS public health degree include:

<table>
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<tr>
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<tbody>
<tr>
<td>YSU 1500</td>
<td>Success Seminar</td>
<td>1-2</td>
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<td>or SS 1500</td>
<td>Strong Start Success Seminar</td>
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<td>Intro to Honors</td>
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</tr>
<tr>
<td>PHLT 1500</td>
<td>Introduction to Online Learning in Health Professions</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 1550</td>
<td>Writing 1</td>
<td>3-4</td>
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<tr>
<td>or ENGL 1549</td>
<td>Writing 1 with Support</td>
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<tr>
<td>ENGL 1551</td>
<td>Writing 2</td>
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<td>CMST 1545</td>
<td>Communication Foundations</td>
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<tr>
<td>MATH 2623</td>
<td>Quantitative Reasoning</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 1560</td>
<td>Introduction to Philosophy (fulfills major requirement)</td>
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</tr>
<tr>
<td>or PHIL 2625</td>
<td>Introduction to Professional Ethics</td>
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<tr>
<td>Arts and Humanities (1 course)</td>
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<tr>
<td>BIOL 1545 &amp; 1545L</td>
<td>Allied Health Anatomy and Physiology Laboratory</td>
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</tr>
<tr>
<td>Natural Sciences (1 course)</td>
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</tr>
<tr>
<td>SOC 1500</td>
<td>Introduction to Sociology (fulfills major requirement)</td>
<td>3</td>
</tr>
<tr>
<td>Social Science (1 course)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>PHLT 1531</td>
<td>Fundamentals of Public Health (fulfills major requirement)</td>
<td>3</td>
</tr>
<tr>
<td>PHLT 1568</td>
<td>Healthy Lifestyles (fulfills major requirement)</td>
<td>3</td>
</tr>
<tr>
<td>Major Requirements</td>
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<tr>
<td>FNUT 1551</td>
<td>Normal Nutrition</td>
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<td>PHLT 1513</td>
<td>Introduction to Environmental Health and Safety</td>
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<tr>
<td>PHLT 2607</td>
<td>Ethical Issues in Public Health</td>
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<tr>
<td>PHLT 2692</td>
<td>Human Sexuality</td>
<td>3</td>
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<td>PHLT 3702</td>
<td>Health Education Theory and Methods</td>
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<tr>
<td>PHLT 3709</td>
<td>Elements of Urban Environmental Health Practices</td>
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<td>PHLT 3725</td>
<td>Topics in Public Health</td>
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<td>PHLT 3731</td>
<td>Drug Use and Abuse</td>
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<td>PHLT 3757</td>
<td>Health and Disease</td>
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<td>PHLT 3791</td>
<td>Community Health</td>
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<td>PHLT 4826</td>
<td>Community Health Planning and Promotion</td>
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<td>PHLT 4827</td>
<td>Evaluation of Health Promotion Programs</td>
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<tr>
<td>PHLT 4828</td>
<td>Grant Writing</td>
<td>3</td>
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<tr>
<td>PHLT 4891</td>
<td>Public Health Internship</td>
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<tr>
<td>PHLT 4899</td>
<td>Public Health Senior Seminar</td>
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<td>PHLT 5804</td>
<td>Multicultural Health</td>
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<td>PHLT 5810</td>
<td>Agents of Mass Casualty</td>
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<td>PHLT 5812</td>
<td>Crisis Management in Public Health</td>
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<td>AHLT 4806</td>
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<td>Environmental Health Concerns</td>
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<tr>
<td>AHLT 4810</td>
<td>Management Skills for Health Professionals</td>
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<tr>
<td>AHLT 5807</td>
<td>Epidemiology</td>
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</table>

Total Semester Hours 121-123

A total of 120 semester hours are required for the BSAS in public health. No minor is required for this professional BSAS degree.

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Fall</th>
<th>S.H.</th>
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<tbody>
<tr>
<td>YSU 1500</td>
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<td>ENGL 1550</td>
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<td>3-4</td>
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<tr>
<td>CMST 1545</td>
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| Semester Hours | 16-17 |

Spring

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<tbody>
<tr>
<td>AHLT 3708</td>
<td>Preventive Public Health Care</td>
<td>3</td>
</tr>
</tbody>
</table>
Bachelor of Science in Dental Hygiene

Program Director
Suzanne Smith
(330) 941-1766 or (330) 941-3342
smsmith05@ysu.edu

Overview
(330) 941-3342

The Bachelor of Science in Dental Hygiene (BSDH) degree requires nine semesters of study including three semesters of coursework in the basic sciences and general education, which precede admission into the program. In the spring semester of the second year, students will begin taking the dental hygiene courses. The program is designed to prepare students as clinical dental hygienists and to pursue other possible career options such as education, public health, and research. Prospective students complete educational requirements that provide a broad academic background while attaining comprehensive dental hygiene knowledge and clinical experience.

At the end of the fourth year of the program, students are eligible to take state, regional and national board examinations. Upon successful completion of these comprehensive written and clinical examinations, the student may apply for a license to practice dental hygiene in the state as a registered dental hygienist.

The registered dental hygienist is a licensed professional who provides dental hygiene treatment and related preventive services. Clinical skills of the hygienist include:

- the administration of local anesthesia and nitrous oxide
- recording medical and dental histories
- exposing and interpreting radiographs

Learning Outcomes

The student learning outcomes for public health are as follows:

- The public health student will demonstrate skill in competence in core Public Health content including program planning and evaluation, program implementation, coordination of effective communication, use of resources, environmental health and safety, and cultural competence by achieving a score of at least 85% on a program comprehensive exam taken as part of PHLT 4898 Environmental Health and Safety Senior Seminar or PHLT 4899 Public Health Senior Seminar courses.
- The public health student will demonstrate mastery of entry-level Public Health competency by receiving an internship score of at least 85% by his/her public health/environmental health internship supervisor.

Bachelor of Science in Dental Hygiene
• making study models
• performing extra-oral and intra-oral examinations which include cancer screenings; dietary management; preliminary dental charting and periodontal evaluations
• scaling and root planing
• polishing
• patient education
• placing sealants
• administering fluoride therapy

Many states permit the hygienist to perform additional duties such as placing temporary restorative materials.

The dental hygienist also functions as a dental health educator and is responsible for the preventive dental health program in private dental practices as well as in other settings. The hygienist teaches patients proper oral health care in order to reduce oral diseases and disorders.

The hygienist's role in service to the community may include increasing public awareness of dental health, serving as a resource person to school systems, providing screenings to children or various groups, and making visits to nursing homes, hospitals and/or schools for the mentally or physically handicapped.

Accreditation
The dental hygiene program is accredited by the American Dental Association Commission on Dental Accreditation. The Commission is a specialized accrediting body recognized by the United States Department of Education.

The Commission on Dental Accreditation
211 East Chicago Avenue
Chicago, IL 60611
(312) 440-2500

Admission to the Program
Admission to the University provides students with the opportunity to complete a core of pre-dental hygiene courses. All students must complete and/or be registered for all of the pre-dental hygiene courses (the first year fall semester, the first year spring semester, and the second year fall semester) after which they may apply and compete for a position in the Bachelor of Science in Dental Hygiene program. Please note that due to limited clinical capacity and available resources, admission to the University and completion of the pre-dental hygiene courses does not guarantee admission to the program. The courses in BOLD on the Admission Policy document will be used in the calculation of the student’s pre-dental hygiene GPA which will be used in ranking students.

Admitted students who voluntarily withdraw from the Dental Hygiene Program will be allowed to reapply only one additional time. This is enforced in fairness to other applicants.

A criminal background check which includes fingerprinting for the Ohio Bureau of Criminal Identification and Investigation (BCI & I) and the Federal Bureau of Investigation (FBI) is required for licensure in Ohio. If a student has been convicted of a felony or misdemeanor related to substance abuse or a crime involving moral turpitude, licensure may be denied by the Ohio State Dental Board. For further information regarding licensure and the results of fingerprinting call the Ohio State Dental Board at (614) 466-2580.

Students can access Transferology (https://www.transferology.com/), a free web-based source where they can find accurate information regarding courses that transfer and apply to a degree program.

Prospective students must complete a minimum of 12 hours of observation of a registered dental hygienist in two separate dental offices or clinics. Observation forms are available on the Dental Hygiene website. Each prospective student must print the form, fill it out and return it by September 15 of the year of application. Mail with appropriate signatures to:

Youngstown State University
Dental Hygiene Program
One University Plaza
Youngstown, OH 44555.

New, Current, Former, and Transfer Students
Students must apply and compete for conditional acceptance into the dental hygiene program by September 15 for spring semester admittance. Rankings for admission will include a minimum GPA of 2.70, in the bolded courses (see Admissions Policy) and a cumulative grade point average of 2.5 or greater. ALL pre-dental hygiene courses must be completed with a “C” or better at the end of the fall semester of the second year (as outlined below).

For more information, visit the Department of Dental Hygiene (http://www.ysu.edu/academics/bitonte-college-health-and-human-services/dental-hygiene-major/).

Pre-Dental Hygiene Courses

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Fall</th>
<th>S.H.</th>
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</thead>
<tbody>
<tr>
<td>ENGL 1550</td>
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<tr>
<td>HAHS 1500</td>
<td>Strong Start FYE</td>
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<tr>
<td>BIOL 1545</td>
<td>Allied Health Anatomy and PhysiologyLaboratory</td>
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<tr>
<td>&amp; 1545L</td>
<td>and Allied Health Anatomy and PhysiologyLaboratory</td>
<td></td>
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<tr>
<td>CHEM 1505</td>
<td>Allied Health Chemistry 1</td>
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<td>&amp; 1505L</td>
<td>and Allied Health Chemistry 1 Laboratory</td>
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| | Semester Hours | 13 |

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<tr>
<th>Year 2</th>
<th>Fall</th>
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<tr>
<td>BIOL 1560</td>
<td>Microbiology for the Health Professions</td>
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</tr>
<tr>
<td>MLT 2687L</td>
<td>Microbiology for Health Care Laboratory</td>
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</tr>
<tr>
<td>or BIOL 1560L</td>
<td>or Microbiology Laboratory for Health Professions</td>
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<tr>
<td>PHIL 2625</td>
<td>Introduction to Professional Ethics</td>
<td>3</td>
</tr>
<tr>
<td>SOC 1500</td>
<td>Introduction to Sociology</td>
<td>3</td>
</tr>
<tr>
<td>Arts and Humanities</td>
<td>3</td>
<td></td>
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<tr>
<td>Social and Personal Awareness Elective</td>
<td>3</td>
<td></td>
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</tbody>
</table>

| | Semester Hours | 15 |
| | Total Semester Hours | 43 |

Current Students
Current students must apply by September 15 for spring semester admittance. Application packets are in the Dean’s office, Bitonte College of Health and Human Services, Cushwa Hall, Room 2104. All necessary reports and
transcripts must be received by September 15. No applications will be considered after this deadline.

New, Transfer, and Former YSU Students

New, transfer, and former YSU students must first apply and be admitted to the University by completing the undergraduate admissions form and indicating dental hygiene as the intended major.

Submit transcripts from each of the post secondary institutions and high school(s) attended. Transcripts of any academic work being completed during the academic year of the requested admission date must be submitted to YSU Admissions Office by September 15. No applications will be considered after this deadline.

Observation Requirement

All prospective students must complete a minimum of 12 hours of observation of a registered dental hygienist in at least two separate dental offices or dental clinics. Students must dress appropriately. Do not wear shorts, jeans, tennis shoes, flip-flops or other unprofessional clothing. Hair must be pulled away from the face, and make-up and perfume should be moderately applied. Observation forms are available on the dental hygiene website. Each prospective student must print the form and fill it out. The forms with the appropriate signatures must be mailed to:

Youngstown State University
Dental Hygiene Program
One University Plaza
Youngstown, OH 44555

Factors affecting admission will include:

1. Pre-Dental Hygiene G.P.A.
2. Cumulative G.P.A.
3. All Pre-Dental Hygiene courses completed with a "C" or better by the end of the fall semester.
4. Number of repetitions of BOLD pre-dental hygiene courses (as indicated in Section A).
5. As the number of repetitions increases, the likelihood of being admitted decreases. Applicants will have within the last five years, no more than two repeated classes in all the pre-dental hygiene courses. A repeated course must be completed with a grade of "C" or better and all incompletes must be removed before beginning the dental hygiene curriculum.
6. Satisfactory completion of the dental hygiene observation forms.

Upon receiving admission to the Dental Hygiene Program, and as a condition of admission, students must show satisfactory evidence of the following:

1. Current CPR/BLS certification
2. Completed physical and dental exam
3. Proof of required immunization requirements

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General Education Requirements

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Bachelor of Science in Dental Hygiene

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**Total Semester Hours**: 123-126

### Year 1

#### Fall

- **YSU 1500**: Success Seminar 1
- **ENGL 1550** or **ENGL 1549**: Writing 1 or Writing 1 with Support 3-4
- **BIOL 1545 & 1545L**: Allied Health Anatomy and Physiology and Allied Health Anatomy and Physiology Laboratory 5
- **CHEM 1505 & 1505L**: Allied Health Chemistry 1 and Allied Health Chemistry 1 Laboratory 3

**Semester Hours**: 12-13

#### Spring

- **ENGL 1551**: Writing 2 3
- **CMST 1545**: Communication Foundations 3
- **CHEM 1506 & 1506L**: Allied Health Chemistry 2 and Allied Health Chemistry 2 Laboratory 3
- **PSYC 1560**: General Psychology 3
- **MATH 2623** or **STAT 2625**: Quantitative Reasoning or Statistical Literacy and Critical Reasoning 3-4

**Semester Hours**: 15-16

### Year 2

#### Fall

- **BIOL 1560**: Microbiology for the Health Professions 2
- **BIOL 1560L or MLT 2687L**: Microbiology Laboratory for Health Professionals or Microbiology for Health Care Laboratory 1
- **PHIL 2625**: Introduction to Professional Ethics 3
- **SOC 1500**: Introduction to Sociology 3
- **Arts and Humanities**: 3
- **Social and Personal Awareness Elective**: 3

**Semester Hours**: 15

#### Spring

- **DHYG 2601**: Dental Hygiene 1 3
- **DHYG 2601L**: Clinical Dental Hygiene 1 2
- **DHYG 2620**: Head and Neck Anatomy 2
- **DHYG 2620L**: Head and Neck Anatomy Lab 1
- **DHYG 2630**: Management of Medical/Dental Emergencies 2
- **Social and Personal Awareness Elective**: 3

**Semester Hours**: 13

#### Summer

- **DHYG 2602**: Dental Hygiene 2 2
- **DHYG 2602L**: Clinical Dental Hygiene 2 2
- **DHYG 2640**: Oral Histology 2

**Semester Hours**: 6

### Year 3

#### Fall

- **DHYG 3703**: Dental Hygiene 3 3
- **DHYG 3703L**:Clinical Dental Hygiene 3 3
- **DHYG 3750**: Oral Pathology 2
- **DHYG 3760**: Dental Radiology 3
- **DHYG 3760L**: Dental Radiology Lab 1
- **DHYG 3770**: Periodontology 3
- **AHLT 4805**: Health Education for Allied Health 3

**Semester Hours**: 18

#### Spring

- **DHYG 3704**: Dental Hygiene 4 3
- **DHYG 3704L**: Clinical Dental Hygiene 4 3
- **DHYG 3780**: Pharmacology 2
- **DHYG 3790**: Local Anesthesia and Pain Control for Dental Hygienists 2
- **DHYG 3790L**: Local Anesthesia and Pain Control Clinic 1
- **AHLT 4806**: Research Methods 3

**Semester Hours**: 14

### Year 4

#### Fall

- **DHYG 4805**: Dental Hygiene 5 3
- **DHYG 4805L**: Clinical Dental Hygiene 5 4
- **DHYG 4830**: Dental Materials 1
- **DHYG 4830L**: Dental Materials Lab 1
- **DHYG 4840**: Directed Dental Hygiene Research 3
- **DHYG 4845**: Expanded Functions for the Dental Hygienist 3
- **DHYG 4845L**: Expanded Functions for the Dental Hygienist Lab 1

**Semester Hours**: 16

#### Spring

- **DHYG 4806**: Dental Hygiene 6 2
- **DHYG 4806L**: Clinical Dental Hygiene 6 4
- **DHYG 4850**: Dental Public Health 3
- **DHYG 4850L**: Community Clinicals 1
- **DHYG 4860**: Ethics and Practice Concepts 2
- **DHYG 4855L**: Expanded Functions Clinical 2

**Semester Hours**: 14

**Total Semester Hours**: 123-125

### Learning Outcomes

The student learning outcomes for the dental hygiene program are as follows:

- The graduates will recognize and apply legal, ethical and regulatory concepts in the practice of dental hygiene.
- The graduates will demonstrate competency in performing the clinical skills to achieve and maintain the oral health of their patients.
- The students will develop and conduct research that includes data collection, statistical analysis, and dissemination of results.

### Bachelor of Science in Medical Laboratory Science

**Program Director**

Joan O'Connell-Spalla  
(330) 941-1761  
joconnells@ysu.edu

**Overview**

**Medical Laboratory Programs**

Laboratory analysis plays an important role in the detection, diagnosis, and treatment of many diseases. Laboratory professionals perform a myriad of such tests to aid the physician in the management of disease.
For more information, contact Joan O'Connell-Spalla 330-941-1761 joconnellsplala@ysu.edu

MLS Internship Guidelines
Students should apply for Medical Laboratory Science Internship upon completion of the second year of the program or after completing approximately 60-65 semester hours. Application packets containing information on clinical affiliations and the application process are available from the program director or in the Department of Health Professions. Students should apply for graduation at the beginning of the junior year so their transcripts may be evaluated by an academic advisor in the Bitont College of Health and Human Services. This application will help ensure that all of the requirements for internship and graduation have been fulfilled.

The University does not guarantee acceptance into the fourth year of hospital clinical internship. Selection and acceptance into a particular hospital program is based on that program's admission and selection process. Thus, students are selected by the hospital programs, which are very competitive. Students are urged to maintain a minimum 3.0 GPA, especially in all science and medical laboratory courses. To enhance their chances of acceptance into a medical internship, students are encouraged to apply to several accredited programs.

A list of these programs is available through the program director. Students should notify the program director upon their acceptance by a professional program.

Medical Laboratory Science (BS-MLS) Curriculum

The medical laboratory science program is a four-year program leading to a Bachelor of Science degree with a major in Medical Laboratory Science. Students in the program must have a physical examination and provide records of their immunizations, including the hepatitis B immunization series.

All course work in the MLS program must be completed with a minimum grade of "C". Students must maintain an overall GPA of 2.75 and a GPA of 2.75 in all MLS courses. Students receiving a total of 6 semester hours of "D" or "F" grades in MLS, biology or chemistry courses will be dismissed from the program. Readmission to the program is based on GPA and on the availability of space in the class.

The program follows the "3+1" format with the student completing a pre-professional phase of courses in clinical laboratory technology, general chemistry, biological sciences, organic and biochemistry, microbiology, immunology, and mathematics during the first three years of the program. The final year of the program is completed at an accredited MLS hospital program. Upon successful program completion, graduates are qualified to take the certification examinations offered through ASCP and become certified as MLS (ASCP). Additionally, a MLT-to-MLS completion program is available.

Medical laboratory scientists perform hundreds of scientific procedures that have been devised to detect subtle changes that occur in disease. The MLS performs a full range of laboratory tests, ranging from complete blood counts, to more complex tests to uncover diseases such as leukemia, and diabetes. Studying blood cells under the microscope, the analysis of the chemical composition of blood, the isolation and identification of disease causing bacteria, and blood grouping and cross matching for transfusions are examples of the high complexity procedures performed by medical laboratory scientists. Positions are available as bench-level technologists, supervisors, and laboratory managers.

In addition to traditional laboratory careers, there are opportunities in education, research, and in industry as technical and sales representatives. In their quest to aid the physician and other health care providers, laboratory professionals do much more than look through a microscope. They operate complex analytical equipment, perform computations, and utilize precision instruments. Medical laboratory scientists act as an integral part of the health care team. Because of their academic and diverse clinical experience, graduates are well qualified for post-graduate programs in medicine, clinical chemistry, and biology.

Advanced Placement Option -Medical Laboratory Science

The Advanced Placement Option in the Medical Laboratory Science program provides a pathway for ASCP certified Medical Laboratory Technicians (MLT) to become Medical Laboratory Scientists (MLS). The program is designed to meet the needs of the working medical laboratory technician so that they can pursue their degree while still employed as a laboratory professional and to address the growing local, regional and national shortage of medical laboratory scientists.

Applicants must meet the following criteria for acceptance into the program:

- Have graduated from a NAACLS accredited MLT/CLT program
- Have completed prerequisite course work in biology, chemistry, and mathematics and also meet Biology and Chemistry guidelines for eligibility for the ASCP MLS Certification examination.
- Be certified as a MLT (ASCP)
- Be employed in an accredited laboratory that is able to provide training in all required MLS disciplines.

Students may transfer courses from approved institutions with prior approval from the program director or department chairperson. Students may be granted experiential credit for a clinical course and, if so, will not be required to register for that course.

The MLS Advanced Placement Option is accredited through the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS: 5600 N. River Rd. Suite 720 Rosemont, IL 60018-5119, Phone: 773.714.8880, www.naacls.org, info@naacls.org

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Biology Courses
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**Total Semester Hours:** 124-125

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</tbody>
</table>
Applicants must meet the following criteria for acceptance into the program:

- Be employed in an accredited laboratory that is able to provide training in all required MLS disciplines.
- Have completed prerequisite course work in biology, chemistry, and mathematics and also meet Biology and Chemistry guidelines for eligibility for the ASCP MLS Certification examination.
- Have graduated from a NAACLS accredited MLT/CLT program.
- Be certified as an MLT (ASCP).
- Graduate from a NAACLS accredited MLT/CLT program.

Students may transfer courses from approved institutions with prior approval from the program director or department chairperson. Students may be granted experiential credit for a clinical course and, if so, will not be required to register for that course.

Outcome measures for the MLS Advanced Placement program over the past three years include: 100% graduation rate, 100% placement rate, 0% attrition, and 67% first-time passage rate for those who took the MLS ASCP certification exam within one year of graduation from the program.

The MLS Advanced Placement Option is accredited through the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS: 5600 N. River Rd. Suite 720 Rosemont, IL 60018-5119, Phone: 773.714.8880, www.naacs.org, info@naacls.org

<table>
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<tr>
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<td>CMST 1545</td>
<td>Communication Foundations</td>
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<tr>
<td>STAT 2625</td>
<td>Statistical Literacy and Critical Reasoning</td>
<td>6</td>
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<tr>
<td>STAT 2601</td>
<td>Introductory Statistics</td>
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</tr>
<tr>
<td>AHLT 1500</td>
<td>Introduction to Online Learning in Health Professions</td>
<td>3</td>
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</table>

**Bachelor of Science in Medical Laboratory Science Advanced Placement Option**

Program Director: Joan O'Connell-Spalla
(330) 941-1761, joconnellspalla@ysu.edu

**Advanced Placement Option - Medical Laboratory Science**

The Advanced Placement Option in the Medical Laboratory Science program provides a pathway for ASCP certified Medical Laboratory Technicians (MLT) to become Medical Laboratory Scientists (MLS). The program is designed to meet the needs of the working medical laboratory technician so that they can pursue their degree while still employed as a laboratory professional and to address the growing local, regional and national shortage of medical laboratory scientists.

Applicants must meet the following criteria for acceptance into the program:

- Graduates will be prepared to function as entry-level health care professionals in the medical laboratory as medical laboratory technicians and medical laboratory scientists. At entry level, the medical laboratory graduate will be able to demonstrate the ability to comprehend, apply and evaluate information relative to the medical laboratory profession.
- These learning outcomes include comprehension of the theory and the ability to apply and evaluate the didactics of hematology, clinical chemistry, immunohematology, microbiology, immunology, coagulation, molecular diagnostics, and other emerging diagnostics.
- Graduates will be prepared to function as entry-level health care professionals in the medical laboratory as medical laboratory technicians and medical laboratory scientists. Upon completion of the program, graduates will demonstrate technical proficiency in laboratory applications.
- These psychomotor learning outcomes include the performance of laboratory procedures in hematology, clinical chemistry, immunohematology, microbiology, immunology, coagulation, molecular diagnostics, and other emerging diagnostics. The graduate will demonstrate proficiency in the functions of all phases of laboratory analysis (pre-analytical, analytical, and post-analytical processes).
- Graduates will demonstrate professional conduct and interpersonal communication skills consistent with the medical laboratory profession.
- Students will exhibit the ability to think critically across all 3700-level courses through the application of fundamental didactic and psychomotor skills to assess the medical relevance and significance of specific aspects of laboratory testing.

**Learning Outcomes**

The student learning outcomes for the medical laboratory programs (MLS-BS and MLT-AAS) are as follows:

- Graduates will be prepared to function as entry-level health care professionals in the medical laboratory as medical laboratory technicians and medical laboratory scientists. At entry level, the medical laboratory graduate will be able to demonstrate the ability to comprehend, apply and evaluate information relative to the medical laboratory profession.
- These learning outcomes include comprehension of the theory and the ability to apply and evaluate the didactics of hematology, clinical chemistry, immunohematology, microbiology, immunology, coagulation, molecular diagnostics, and other emerging diagnostics.
- Graduates will be prepared to function as entry-level health care professionals in the medical laboratory as medical laboratory technicians and medical laboratory scientists. Upon completion of the program, graduates will demonstrate technical proficiency in laboratory applications.
- These psychomotor learning outcomes include the performance of laboratory procedures in hematology, clinical chemistry, immunohematology, microbiology, immunology, coagulation, molecular diagnostics, and other emerging diagnostics. The graduate will demonstrate proficiency in the functions of all phases of laboratory analysis (pre-analytical, analytical, and post-analytical processes).
- Graduates will demonstrate professional conduct and interpersonal communication skills consistent with the medical laboratory profession.
- Students will exhibit the ability to think critically across all 3700-level courses through the application of fundamental didactic and psychomotor skills to assess the medical relevance and significance of specific aspects of laboratory testing.

**Bachelor of Science in Respiratory Care in Respiratory Care**

Program Director
Dr. Kelly L. Colwell
(330) 941-2631, kcolwell@ysu.edu

<table>
<thead>
<tr>
<th>COURSE</th>
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</thead>
<tbody>
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<td>MLS 4800</td>
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<td>MLS 4800L</td>
<td>Advanced Clinical Chemistry Clinical Experience</td>
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<td>MLS 4801</td>
<td>Advanced Hematology</td>
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<tr>
<td>MLS 4801L</td>
<td>Advanced Hematology Clinical Practice</td>
<td>3</td>
</tr>
<tr>
<td>MLS 4802</td>
<td>Advanced Immunohematology</td>
<td>4</td>
</tr>
<tr>
<td>MLS 4802L</td>
<td>Advanced Immunohematology Clinical Practice</td>
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</tr>
<tr>
<td>MLS 4803</td>
<td>Advanced Microbiology</td>
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<td>MLS 4803L</td>
<td>Advanced Microbiology Clinical Practice</td>
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<tr>
<td>MLS 4804</td>
<td>Miscellaneous Clinical Experience</td>
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</tr>
<tr>
<td>MLS 4804L</td>
<td>Miscellaneous Clinical Practice</td>
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</tbody>
</table>

**Science Requirements**

Biology (Must include A&P, Micro, Immunology) | Chemistry (Must include Organic or Biochemistry) | 16 | 16
Overview

Respiratory care is an allied health profession concerned with the diagnostic evaluation, treatment, and management of patients with cardiopulmonary disorders. The respiratory care practitioner (RCP) is proficient in:

- therapeutic administration of medical gases and aerosols
- intermittent and continuous mechanical ventilation
- broncho-pulmonary hygiene
- basic and advanced cardiac life support techniques
- non-invasive patient monitoring
- pulmonary function evaluation
- arterial blood gas analysis
- airway management procedures
- pulmonary rehabilitation techniques

A licensed RCP must also be knowledgeable regarding various assessment techniques and patient education models. These skills are used with neonatal, pediatric, and adult patients in acute, sub-acute, and home care settings. To function effectively as a member of the multidisciplinary health care team, the RCP must have a sound understanding of:

- the physiological, psychological, and cultural needs of the patient
- the role of the various therapeutic interventions in the patient care plan
- development of broad-based skills to more effectively contribute to the overall care of the patient

Theory and laboratory experiences are provided prior to the student’s entry into the clinical education phase of the program. This program can be completed in four calendar years. It includes three summer sessions. A sleep diagnostics option is also available. Please visit Respiratory Care (http://catalog.ysu.edu/undergraduate/colleges-programs/college-health-human-services/department-health-professions/bs-respiratory-care/) for more information.

Accreditation

The Bachelor of Science in Respiratory Care (CoARC #200247) at Youngstown State University, Youngstown, Ohio is accredited by the Commission on Accreditation for Respiratory Care (www.coarc.com (https://www.coarc.com/)). To view CoARC Program outcomes please visit CoARC Outcomes Data (https://www.coarc.com/Students/Programmatic-Outcome-Data.aspx).

The goals of the Bachelor of Science in Respiratory Care are:

- To prepare graduates with demonstrated competence in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains of respiratory care practice as performed by registered respiratory therapists (RRTs).
- To prepare leaders for the field of respiratory care by including curricular content that includes objectives related to acquisition of skills one or more of the following: management, education, research, and advanced clinical practice (which may include an area of clinical specialization).

Polysomnography Certificate is:

- To prepare sleep disorder specialists with demonstrated competence in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains of polysomnography practice as performed by sleep disorder specialists (SDS).

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<tr>
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<tbody>
<tr>
<td>BIOL 1545</td>
<td>Allied Health Anatomy and Physiology</td>
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<tr>
<td>BIOL 1545L</td>
<td>Allied Health Anatomy and Physiology</td>
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<tbody>
<tr>
<td>CHEM 1510</td>
<td>Chemistry for the Allied Health Sciences</td>
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<tr>
<td>CHEM 1510L</td>
<td>Chemistry for the Allied Health Sciences Laboratory (CHEM 1510/1510L satisfies a NS GER Knowledge Domain)</td>
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<tr>
<td>MATC 1501</td>
<td>Medical Terminology</td>
<td>3</td>
</tr>
<tr>
<td>MATH 2623</td>
<td>Quantitative Reasoning (MATH 2623 satisfies the MATH GER for University Basic Skills)</td>
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**FIRST YEAR REQUIREMENT - STUDENT SUCCESS**

YSU 1500  | Success Seminar                          | 1-2  |
or SS 1500 | Strong Start Success Seminar            |      |
or HONR 1500| Intro to Honors                         |      |

**General Education Requirements**

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<tr>
<th>COURSE</th>
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<tbody>
<tr>
<td>ENGL 1550</td>
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<td>CMST 1545</td>
<td>Communication Foundations</td>
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<tr>
<td>BIOL 1560</td>
<td>Microbiology for the Health Professions</td>
<td>2</td>
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<tr>
<td>BIOL 1560L</td>
<td>Microbiology Laboratory for Health Professions (required for major)</td>
<td>1</td>
</tr>
<tr>
<td>PHIL 2625</td>
<td>Introduction to Professional Ethics (required for major)</td>
<td>3</td>
</tr>
<tr>
<td>One additional Arts and Humanities course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Natural Sciences (2 courses; 1 with lab) (6-7 s.h.)</td>
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<td></td>
</tr>
<tr>
<td>BIOL 1560</td>
<td>Microbiology for the Health Professions</td>
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</tr>
<tr>
<td>BIOL 1560L</td>
<td>Microbiology Laboratory for Health Professions (required for major)</td>
<td>1</td>
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<tr>
<td>one additional Natural Science course (can be met with BIOL 1545/1545L or CHEM 1510/1510L)</td>
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<tr>
<td>Social Science (6 s.h.)</td>
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</tr>
<tr>
<td>SOC 1500</td>
<td>Introduction to Sociology (required for major)</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 1560</td>
<td>General Psychology (required for major)</td>
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</tr>
<tr>
<td>one additional S&amp;PA course</td>
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**Respiratory Care Courses**

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<thead>
<tr>
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<td>RESC 1529</td>
<td>Respiratory Care Orientation</td>
<td>2</td>
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<tr>
<td>RESC 1531</td>
<td>Respiratory Care Essentials</td>
<td>2</td>
</tr>
<tr>
<td>MATC 2505</td>
<td>Introduction to Pharmacology</td>
<td>3</td>
</tr>
<tr>
<td>RESC 1503</td>
<td>Respiratory Procedures</td>
<td>3</td>
</tr>
<tr>
<td>RESC 1520</td>
<td>Respiratory Care Assessment</td>
<td>2</td>
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<tr>
<td>PHYS 1506</td>
<td>Physics for Health Care</td>
<td>3</td>
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<tr>
<td>AHLT 3705</td>
<td>Pharmacotherapeutics</td>
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<tr>
<td>RESC 2620</td>
<td>Respiratory Assessment</td>
<td>2</td>
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<tr>
<td>RESC 2621</td>
<td>Cardiopulmonary Disease</td>
<td>4</td>
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<tr>
<td>RESC 3706</td>
<td>Respiratory Procedures</td>
<td>2</td>
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<tr>
<td>RESC 3720</td>
<td>Mechanical Ventilation</td>
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<tr>
<td>AHLT 4806</td>
<td>Research Methods</td>
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<tr>
<td>AHLT 5840</td>
<td>Comparative Health Systems</td>
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<td>RESC 2699</td>
<td>Clinical Practice 1</td>
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<tr>
<td>RESC 3708</td>
<td>Respiratory Clinical Specialties</td>
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<td>RESC 3709</td>
<td>Neonatal/Pediatric Respiratory Care</td>
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<tr>
<td>RESC 3725</td>
<td>Mechanical Ventilation</td>
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<tr>
<td>RESC 3731</td>
<td>Respiratory Care Management</td>
<td>3</td>
</tr>
<tr>
<td>RESC 3740</td>
<td>Clinical Practice 2</td>
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<tr>
<td>RESC 3741</td>
<td>Clinical Practice 3</td>
<td>3</td>
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<tr>
<td>RESC 3750</td>
<td>Pulmonary Rehabilitation</td>
<td>2</td>
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<tr>
<td>RESC 3765</td>
<td>Advanced Respiratory Care Diagnostics</td>
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### Bachelor of Science in Respiratory Care (BSRC) Curriculum

#### Year 1

<table>
<thead>
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<th>Semester</th>
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<th>Course Title</th>
<th>Credits</th>
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<tr>
<td>Fall</td>
<td>RESC 4831</td>
<td>Pulmonary Care Management</td>
<td>3</td>
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<tr>
<td></td>
<td>RESC 4838</td>
<td>Respiratory Seminar 1</td>
<td>1</td>
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<td>RESC 4835</td>
<td>Clinical Practice 4</td>
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<td>RESC 4842</td>
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<td>AHLT 4820</td>
<td>Directed Research</td>
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<td>Pulmonary Care Management</td>
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<td>RESC 4846</td>
<td>Sleep Diagnostics 1</td>
<td>3</td>
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<td>RESC 4847</td>
<td>Sleep Clinics 1</td>
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<td>RESC 4848</td>
<td>Sleep Diagnostics 2</td>
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<td>RESC 4849</td>
<td>Sleep Clinics 2</td>
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#### Year 2

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<td>MATC 2605</td>
<td>Introduction to Pharmacology</td>
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<td>Microbiology for the Health Professions</td>
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<td>Respiratory Assessment 2</td>
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<td>Cardiopulmonary Disease</td>
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<td>RESC 3706</td>
<td>Respiratory Procedures 2</td>
<td>3</td>
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<td></td>
<td>RESC 3720</td>
<td>Mechanical Ventilation 1</td>
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#### Year 4

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<td>Fall</td>
<td>RESC 3765</td>
<td>Advanced Respiratory Care Diagnostics</td>
<td>3</td>
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<td></td>
<td>RESC 3741</td>
<td>Clinical Practice 3</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>RESC 4831</td>
<td>Pulmonary Care Management</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>RESC 4838</td>
<td>Respiratory Seminar 1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>AHLT 4820</td>
<td>Directed Research</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>RESC 4846</td>
<td>Sleep Diagnostics 1 (Optional)</td>
<td>3</td>
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<td></td>
<td>RESC 4847</td>
<td>Sleep Clinics 1 (Optional)</td>
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#### Learning Outcomes

The student learning outcomes for the major in Respiratory Care are as follows:

- Upon completion of the program, graduates will demonstrate the ability to comprehend, apply, and evaluate clinical information relevant to their roles as advanced-level respiratory therapists (cognitive domain).
- Upon completion of the program, graduates will demonstrate technical proficiency in all the skills necessary to fulfill their role as advanced level respiratory therapists (psychomotor domain).
- Upon completion of the program, graduates will demonstrate professional behavior consistent with employer expectations as advanced-level respiratory therapists (affective domain).

The student learning outcomes for the Sleep Diagnostic Option in Respiratory Care are as follows:
• Upon completion of the program, graduates will demonstrate the ability to comprehend, apply, and evaluate clinical information relevant to their roles as sleep disorder specialists (cognitive domain).
• Upon completion of the program, graduates will demonstrate technical proficiency in all the skills necessary to fulfill their role as sleep disorder specialists (psychomotor domain).
• Upon completion of the program, graduates will demonstrate professional behavior consistent with employer expectations as sleep disorder specialists (affective domain).

Bachelor of Science in Respiratory Care Degree Advancement Completion Track

Program Director
Dr. Kelly L. Colwell
(330) 941-2631
kicolwell@ysu.edu

Overview
This online program is designed to provide a focused advancement option that will bridge the depth and breadth of knowledge of the certified or registered respiratory therapist who has graduated from a Commission on Accreditation for Respiratory Care (CoARC) accredited associate degree program to meet the clinical and leadership needs of the respiratory care profession. The core curriculum builds on the existing foundation of knowledge and skills in the areas of:

• advanced cardiopulmonary disease management
• advanced clinical applications
• clinical research
• leadership and technology related to the practice of respiratory care

Upon completion of the Required Core Upper Division Courses with a minimum GPA of 2.5, the student will be awarded up to 17 semester hours of upper division credit from their associate degree respiratory care courses.

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<td>RESC 1500</td>
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<td>RESC 3731</td>
<td>Respiratory Care Management</td>
<td>3</td>
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<tr>
<td>CHEM 1520</td>
<td>Allied Health Chemistry for Online Programs (Chem 1520 or equivalent (3SH))</td>
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<tr>
<td>PSYC 3758</td>
<td>Lifespan Development</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 1510</td>
<td>Chemistry for the Allied Health Sciences</td>
<td>4</td>
</tr>
<tr>
<td>PHIL 2625</td>
<td>Introduction to Professional Ethics</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 1551</td>
<td>Writing 2</td>
<td>1</td>
</tr>
<tr>
<td>CMST 1545</td>
<td>Communication Foundations</td>
<td>3</td>
</tr>
<tr>
<td>STAT 2625</td>
<td>Statistical Literacy and Critical Reasoning</td>
<td>4</td>
</tr>
</tbody>
</table>

Total Semester Hours 138-140

1. Certain general education courses, such as ENGL 1551, have prerequisites. Normal prerequisite rules apply for students taking the General Education Completion Program.
2. Transfer credit hours are dependent upon course evaluation and are estimated at 41 hours based on a 60 hour Associates program. Credit hours may vary depending on the institution where courses were taken and accreditation requirements.

Bachelor of Science in Respiratory Care in Respiratory Care Completion Track with Advanced Placement Option to Master of Respiratory Care

Program Director
Dr. Kelly L. Colwell
(330) 941-2631
kicolwell@ysu.edu

Overview
This online program is designed to provide a focused advancement option that will bridge the depth and breadth of knowledge of the certified or registered respiratory therapist who has graduated from a Commission on Accreditation for Respiratory Care (CoARC) accredited associate degree program to meet the clinical and leadership needs of the respiratory care profession. The core curriculum builds on the existing foundation of knowledge and skills in the areas of:

• advanced cardiopulmonary disease management
• advanced clinical applications
• clinical research
• leadership and technology related to the practice of respiratory care
Upon completion of the Required Core Upper Division Courses with a minimum GPA of 2.5, the student will be awarded up to 17 semester hours of upper division credit from their associate degree respiratory care courses.

The advanced placement option allows the undergraduate BSRC Completion student to take up to 9 semester hours of graduate credit that can be applied to the Master of Respiratory Care program. Upon completion of the BSRC, the student must apply to and be accepted into the Graduate School and the Master of Respiratory Care Program in order to apply the graduate credits earned during the BSRC program. To be accepted into the BSRC Advanced Placement option, the student must be Junior standing in BSRC Completion Program and have completed 15 semester hours of required core upper division courses and have an overall minimum GPA of 3.2.

Once accepted into the BSRC Advanced Placement Option, the student must maintain a GPA of 3.0 to continue to take graduate level courses.

The goals of the Bachelor of Science in Respiratory Care are:

- To prepare graduates with demonstrated competence in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains of respiratory care practice as performed by registered respiratory therapists (RRTs).
- To prepare leaders for the field of respiratory care by including curricular content that includes objectives related to acquisition of skills one or more of the following: management, education, research, and advanced clinical practice.

### COURSE TITLE S.H.

**FIRST YEAR REQUIREMENT - STUDENT SUCCESS**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
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<tbody>
<tr>
<td>YSU 1500</td>
<td>Success Seminar</td>
<td>1-2</td>
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<tr>
<td>or SS 1500</td>
<td>Strong Start Success Seminar</td>
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</tr>
<tr>
<td>or HONR 1500</td>
<td>Intro to Honors</td>
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**General Education Requirements**

<table>
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<tr>
<th>COURSE</th>
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<tbody>
<tr>
<td>ENGL 1550</td>
<td>Writing 1</td>
<td>3-4</td>
</tr>
<tr>
<td>or ENGL 1549</td>
<td>Writing 1 with Support</td>
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<tr>
<td>ENGL 1551</td>
<td>Writing 2</td>
<td>3</td>
</tr>
<tr>
<td>CMST 1545</td>
<td>Communication Foundations</td>
<td>3</td>
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<tr>
<td>Mathematics (3 s.h.)</td>
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<td>3-4</td>
</tr>
<tr>
<td>Natural Sciences (6 s.h.)</td>
<td></td>
<td>6-7</td>
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<tr>
<td>Arts &amp; Humanities (6 s.h.)</td>
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<tr>
<td>Social Sciences (6 s.h.)</td>
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<tr>
<td>Social and Personal Awareness (6 s.h.)</td>
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**Associate Degree Respiratory Care Courses**

<table>
<thead>
<tr>
<th>COURSE</th>
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<tbody>
<tr>
<td>RESC 1500</td>
<td>Introduction to Online Learning in Health Professions</td>
<td>3</td>
</tr>
<tr>
<td>RESC 3731</td>
<td>Respiratory Care Management</td>
<td>3</td>
</tr>
<tr>
<td>RESC 3765</td>
<td>Advanced Respiratory Care Diagnostics</td>
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</tr>
<tr>
<td>RESC 4860</td>
<td>Advanced Management of the Ventilator Patient</td>
<td>3</td>
</tr>
<tr>
<td>RESC 4862</td>
<td>Professional Pathways for Respiratory Care Practitioners</td>
<td>3</td>
</tr>
<tr>
<td>RESC 4867</td>
<td>Fundamentals of Leader Development</td>
<td>3</td>
</tr>
<tr>
<td>RESC 4870</td>
<td>Advanced Cardiopulmonary Case Management</td>
<td>3</td>
</tr>
<tr>
<td>AHLT 3705</td>
<td>Pharmacotherapeutics</td>
<td>3</td>
</tr>
<tr>
<td>AHLT 4806</td>
<td>Research Methods</td>
<td>3</td>
</tr>
<tr>
<td>AHLT 4820</td>
<td>Directed Research</td>
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</tr>
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</table>

**BSRC to MRC Advanced Placement Option**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
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<tbody>
<tr>
<td>AHLT 5840</td>
<td>Comparative Health Systems ((Must be taken for graduate credit))</td>
<td>3</td>
</tr>
<tr>
<td>RESC 6900</td>
<td>The Respiratory Care Profession</td>
<td>3</td>
</tr>
<tr>
<td>RESC 6920</td>
<td>Technology Applications for Health and Human Services</td>
<td>3</td>
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</table>

### Electives (if Additional Upper Division Hours Are Needed)

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
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<tbody>
<tr>
<td>RESC 4801</td>
<td>Special Topics in Respiratory Care</td>
<td>1-3</td>
</tr>
<tr>
<td>RESC 4810</td>
<td>Advanced Neonatal and Pediatric Case Management</td>
<td>3</td>
</tr>
<tr>
<td>AHLT 3740</td>
<td>Pathology of Infectious Diseases</td>
<td>3</td>
</tr>
<tr>
<td>AHLT 3755</td>
<td>Principles of Occupational Health and Safety</td>
<td>3</td>
</tr>
<tr>
<td>AHLT 4804</td>
<td>Stress and the Health Care Professional</td>
<td>3</td>
</tr>
<tr>
<td>AHLT 4808</td>
<td>Environmental Health Concerns</td>
<td>3</td>
</tr>
<tr>
<td>AHLT 5831</td>
<td>Industrial Hygiene</td>
<td>3</td>
</tr>
<tr>
<td>AHLT 5816</td>
<td>Environmental Regulations</td>
<td>3</td>
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</table>

**Upper Division (3700, 4800, 5800 level) Hours Required 48 s.h.**

| TOTAL SEMESTER HOURS | 146-152 |

For more information, please visit the Distance Education (http://cms.ysu.edu/administrative-offices/distance-education/online-bachelor-science-respiratory-care-completion/) website.

### Bachelor of Science in Respiratory Care with Advanced Placement Option to Master of Respiratory Care

**Program Director**

Dr. Kelly L. Colwell  
(330) 941-2631  
kcolwell@ysu.edu

**Overview**

Respiratory care is an allied health profession concerned with the diagnostic evaluation, treatment, and management of patients with cardiopulmonary disorders. The respiratory care practitioner (RCP) is proficient in:

- therapeutic administration of medical gases and aerosols
- intermittent and continuous mechanical ventilation
- broncho-pulmonary hygiene
- basic and advanced cardiac life support techniques
- non-invasive patient monitoring
- pulmonary function evaluation
- arterial blood gas analysis
- airway management procedures
- pulmonary rehabilitation techniques

A licensed RCP must also be knowledgeable regarding various assessment techniques and patient education models. These skills are used with neonatal, pediatric, and adult patients in acute, sub-acute, and home care settings. To function effectively as a member of the multidisciplinary health care team, the RCP must have a sound understanding of:

- the physiological, psychological, and cultural needs of the patient
- the role of the various therapeutic interventions in the patient care plan
- development of broad-based skills to more effectively contribute to the overall care of the patient

Theory and laboratory experiences are provided prior to the student’s entry into the clinical education phase of the program. This program can be completed in four calendar years. It includes three summer sessions. A sleep diagnostics option is also available. Please visit Respiratory Care (http://catalog.ysu.edu/undergraduate/colleges-programs/college-health-human-services/department-health-professions/bs-respiratory-care/) for more information.

The advanced placement option allows the undergraduate BSRC student to take up to 9 semester hours of graduate credit that can be applied to...
the Master of Respiratory Care program. Upon completion of the BSRC, the student must apply to and be accepted into the Graduate School and the Master of Respiratory Care Program in order to apply the graduate credits earned during the BSRC program. To be accepted into the BSRC Advanced Placement option, the student must meet the following criteria:

1. Junior standing with an overall GPA of a minimum of 3.2; or,
2. Junior standing in BSRC Completion Program and have completed 15 semester hours of required core upper division courses and have an overall minimum GPA of 3.2.

Once accepted into the BSRC Advanced Placement Option, the student must maintain a GPA of 3.0 to continue to take graduate level courses.

**Accreditation**

The Bachelor of Science in Respiratory Care (CoARC #200247) at Youngstown State University, Youngstown, Ohio is accredited by the Commission on Accreditation for Respiratory Care (www.coarc.com (https://www.coarc.com)). To view CoARC Program outcomes please visit CoARC Outcomes Data (https://www.coarc.com/Students/Programmatic-Outcome-Data.aspx).

The goals of the Bachelor of Science in Respiratory Care are:

- To prepare graduates with demonstrated competence in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains of respiratory care practice as performed by registered respiratory therapists (RRTs).
- To prepare leaders for the field of respiratory care by including curricular content that includes objectives related to acquisition of skills one or more of the following: management, education, research, and advanced clinical practice (which may include an area of clinical specialization).

**Polysomnography Certificate Goal:**

To prepare sleep disorder specialists with demonstrated competence in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains of polysomnography practice as performed by sleep disorder specialists (SDS).

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 1560</td>
<td>Microbiology for the Health Professions (required for major)</td>
<td>2</td>
</tr>
<tr>
<td>BIOL 1560L</td>
<td>Microbiology Laboratory for Health Professions (required for major)</td>
<td>1</td>
</tr>
</tbody>
</table>

One additional Natural Science course (can be met with BIOL 1545/1545L or CHEM 1510/1510L)

**Social Science (6 s.h.)**

- SOC 1500 Introduction to Sociology 3
- PSYC 1560 General Psychology 3
- Social and Personal Awareness (6 s.h.)
  - PSYC 1560 General Psychology 3
  - PHLT 1568 Healthy Lifestyles 3
  - or PHLT 1531 Fundamentals of Public Health 3

One additional S&PA course 3

**Respiratory Care Courses**

- RESC 1529 Respiratory Care Orientation 2
- MATC 2605 Introduction to Pharmacology 3
- RESC 1531 Respiratory Care Essentials 2
- RESC 1503 Respiratory Procedures 1 3
- RESC 1520 Respiratory Care Assessment 1 2
- PHYS 1506 Physics for Health Care 3
- AHLT 3705 Pharmacotherapeutics 3
- RESC 2621 Cardiopulmonary Disease 4
- RESC 2620 Respiratory Assessment 2 2
- RESC 3706 Respiratory Procedures 2 2
- RESC 3720 Mechanical Ventilation 1 2
- RESC 2699 Clinical Practice 1 1
- AHLT 4806 Research Methods 3
- AHLT 5840 Comparative Health Systems 3
- RESC 3708 Respiratory Clinical Specialties 2
- RESC 3725 Mechanical Ventilation 2 2
- RESC 3709 Neonatal/Pediatric Respiratory Care 3
- RESC 3750 Pulmonary Rehabilitation 2
- RESC 3740 Clinical Practice 2 2
- RESC 3731 Respiratory Care Management 3
- RESC 3741 Clinical Practice 3 3
- RESC 3765 Advanced Respiratory Care Diagnostics 3
- RESC 4838 Respiratory Seminar 1 1
- RESC 4831 Pulmonary Care Management 3
- RESC 4835 Clinical Practice 4 3
- RESC 4842 Respiratory Seminar 2 1
- AHLT 4820 Directed Research 3

**BSRC to MRC Advanced Placement Option**

- RESC 6900 The Respiratory Care Profession 3
- RESC 6920 Technology Applications for Health and Human Services 3

*AHLT 5840 Comparative Health Systems must be take for graduate credit

**Total Semester Hours** 120-122

**Bachelor of Science Respiratory Care (BSRC) Curriculum**

**Year 1**

**Fall**

- BIOL 1545 Allied Health Anatomy and Physiology 5
- MATC 1501 Medical Terminology 3
- MATH 2623 Quantitative Reasoning 3

**MATH 2623 Quantitative Reasoning 3**
Learning Outcomes

The student learning outcomes for the major in Respiratory Care are as follows:

- Upon completion of the program, graduates will demonstrate the ability to comprehend, apply, and evaluate clinical information relevant to their roles as advanced-level respiratory therapists (cognitive domain).
- Upon completion of the program, graduates will demonstrate technical proficiency in all the skills necessary to fulfill their role as advanced level respiratory therapists (psychomotor domain).
- Upon completion of the program, graduates will demonstrate professional behavior consistent with employer expectations as advanced-level respiratory therapists (affective domain).

The student learning outcomes for the Sleep Diagnostic Option in Respiratory Care are as follows:

- Upon completion of the program, graduates will demonstrate the ability to comprehend, apply, and evaluate clinical information relevant to their roles as sleep disorder specialists (cognitive domain).
- Upon completion of the program, graduates will demonstrate technical proficiency in all the skills necessary to fulfill their role as sleep disorder specialists (psychomotor domain).
- Upon completion of the program, graduates will demonstrate professional behavior consistent with employer expectations as sleep disorder specialists (affective domain).

Certificate in Health Information Systems

Undergraduate students in Computer Science Information Systems who have an interest in working in healthcare will be afforded the opportunity to acquire a certificate that will teach them computer and data system applications in the healthcare setting. Allied Health and other health-related majors who are already familiar with the healthcare setting will be provided with an opportunity to receive a greater depth and breadth of education in computer and information systems. This will better prepare the student to work with health information systems in the healthcare setting.

COURSE | TITLE | S.H.
--- | --- | ---
RESC 4831 | Pulmonary Care Management | 3
RESC 4838 | Respiratory Seminar 1 | 1
AHLT 4813 |  | 3
AHLT 5840 | Comparative Health Systems (Must be taken for graduate credit) | 3

Semester Hours | 16

Spring
RESC 4835 | Clinical Practice 4 | 3
RESC 4842 | Respiratory Seminar 2 | 1
AHLT 4820 | Directed Research | 3
Social & Personal Awareness Elective | 3
Respiratory Seminar 2 | 3
The Respiratory Care Profession | 3
Technology Applications for Health and Human Services | 3

Total Semester Hours | 16

Learning Outcomes

The student learning outcomes for the major in Respiratory Care are as follows:

- Upon completion of the program, graduates will demonstrate the ability to comprehend, apply, and evaluate clinical information relevant to their roles as advanced-level respiratory therapists (cognitive domain).
- Upon completion of the program, graduates will demonstrate technical proficiency in all the skills necessary to fulfill their role as advanced level respiratory therapists (psychomotor domain).
- Upon completion of the program, graduates will demonstrate professional behavior consistent with employer expectations as advanced-level respiratory therapists (affective domain).

Certificate in Health Information Systems

Undergraduate students in Computer Science Information Systems who have an interest in working in healthcare will be afforded the opportunity to acquire a certificate that will teach them computer and data system applications in the healthcare setting. Allied Health and other health-related majors who are already familiar with the healthcare setting will be provided with an opportunity to receive a greater depth and breadth of education in computer and information systems. This will better prepare the student to work with health information systems in the healthcare setting.

COURSE | TITLE | S.H.
--- | --- | ---
AHLT 3707 | Clinical Informatics for the Healthcare Provider | 3
AHLT 3711 | Health Care Information Systems | 3
AHLT 3745 | Impact of Medical Records on Healthcare Reimbursement | 3

Semester Hours | 16
Minor in Computer Science and Information Systems

CSIS 1590  Survey of Computer Science and Information Systems  3
INFO 2663  Information Technology Management  3

Select one of the following courses

- AHLT 3717  Health Care Policy
- AHLT 5840  Comparative Health Systems

Select one of the following courses  3-4

- CSIS 1525  Survey of Modern Operating Systems
- CSIS 2605  Fundamentals of Programming and Problem-Solving
- CSIS 2610  Programming and Problem-Solving

Total Semester Hours 21-22

Minor in Community Health Planning and Evaluation

The learning outcomes for this minor are:

- Students will be able to describe the context of community health planning and evaluation, its theories, and the organization of community health services.
- Students will be able to demonstrate basic skills in community health planning, evaluation, and if PHLT 4828 is selected, grant funding and development.

COURSE  TITLE  S.H.

Required Courses

- PHLT 1568  Healthy Lifestyles  3
- PHLT 3702  Health Education Theory and Methods  3
- PHLT 3791  Community Health  3
- OR
- AHLT 3708  Preventive Public Health Care  3
- PHLT 4801  Field Work in Health Education  1
- PHLT 4826  Community Health Planning and Promotion  4
- PHLT 4827  Evaluation of Health Promotion Programs  3
- PHLT 4828  Grant Writing  3

Total Minor Hours 20 sh

Bachelor of Science in Applied Science in Food and Nutrition

Required Courses

- ENGL 1550  Writing 1  3
- ENGL 1551  Writing 2  3
- FNUT 1551  Normal Nutrition  3
- BIOR 1551  Anatomy and Physiology 1
- & 1551L  and Anatomy and Physiology 1 Laboratory  4
- BIOR 1552  Anatomy and Physiology 2
- & 1552L  and Anatomy and Physiology 2 Laboratory  4
- CHEM 1510  Chemistry for the Allied Health Sciences  4
- CHEM 1510L  Chemistry for the Allied Health Sciences Laboratory  0
- FNUT 2600  Orientation to Dietetics Major  1

Total Semester Hours 21

Minor in Public Health

The learning outcomes for this minor are:

- The student will be able to describe the five core public health content areas.
- The student will be able to demonstrate basic skills in each of the five core public health content areas.

COURSE  TITLE  S.H.

Required Courses

- PHLT 1568  Healthy Lifestyles  3
- or PHLT 1531  Fundamentals of Public Health  3
- PHLT 3702  Health Education Theory and Methods  3
- PHLT 3709  Elements of Urban Environmental Health Practices  3
- PHLT 3791  Community Health  3
- PHLT 4826  Community Health Planning and Promotion  4
- AHLT 5807  Epidemiology  3

Total Semester Hours 19

Bachelor of Science in Applied Science in Food and Nutrition

Didactic Program in Dietetics

Dr. Zara Rowlands, Program Coordinator
(330) 941-2021
zcshah@ysu.edu

This baccalaureate program is accredited by the Accreditation Council for Education in Nutrition and Dietetics (ACEND) of the Academy of Nutrition and Dietetics (AND). The Didactic Program in Dietetics at YSU is currently accredited, 07/01/2010 - 06/30/2020.

Academy of Nutrition and Dietetics
120 South Riverside Plaza
Suite 2190, Chicago, IL 60606-6995
www.eatright.org

Toll Free Phone: 800-877-1600
Additional Phone: 312-899-0040

Students may select the Didactic Program in Dietetics as a major only after they have met admission criteria. These criteria include grades of “C” or better in the following courses and a minimum cumulative GPA of 2.5:

COURSE  TITLE  S.H.

Required Courses

- PHLT 1568  Healthy Lifestyles  3
- or PHLT 1531  Fundamentals of Public Health  3
- PHLT 3702  Health Education Theory and Methods  3
- PHLT 3709  Elements of Urban Environmental Health Practices  3
- PHLT 3791  Community Health  3
- PHLT 4826  Community Health Planning and Promotion  4
- AHLT 5807  Epidemiology  3

Students who have not yet been admitted to the DPD program but are working toward that end may enroll as “Pre-dietetics-DPD” majors.

Upon satisfactory completion of the DPD, students are issued a verification statement confirming eligibility to apply for an ACEND accredited Dietetic
Internship (DI) or other pre-professional practice program such as an Individualized Supervised Practice Program (ISPP).

Completion of the DI, or an approved pre-professional practice program, establishes eligibility for the Commission on Dietetic Registration (CDR) credentialing examination for dietitians. Successful completion of the examination results in nationally recognized credential as a Registered Dietitian (RD).

Didactic program in dietetics (DPD) graduates may also take the registration credentialing examination for dietitians. Successful completion of the examination establishes eligibility for the Commission on Dietetic Registration (CDR)

For more information, contact Dr. Zara Rowlands at zcshah@ysu.edu or call (330) 941-2021

<table>
<thead>
<tr>
<th>COURSE</th>
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<th>S.H.</th>
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<tbody>
<tr>
<td>YSU 1500</td>
<td>Success Seminar</td>
<td>1-2</td>
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<tr>
<td>or SS 1500</td>
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<td></td>
</tr>
<tr>
<td>or HONR 1500</td>
<td>Intro to Honors</td>
<td></td>
</tr>
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</table>

### General Education Requirements

| ENGL 1550 | Writing 1 | 3-4 |
| or ENGL 1549 | Writing 1 with Support | |
| ENGL 1551 | Writing 2 | 3 |
| CMST 1545 | Communication Foundations | 3 |
| MATH 2623 | Quantitative Reasoning | 3 |
| Arts and Humanities (6 s.h.) | | |
| CHEM 1510 & 1510L | Chemistry for the Allied Health Sciences and Chemistry for the Allied Health Sciences Laboratory | 4 |
| BIOL 1551 & 1551L | Anatomy and Physiology 1 and Anatomy and Physiology 1 Laboratory | 4 |
| Social Science (6 s.h.) | | |
| PSYC 1560 | General Psychology | 3 |
| SOC 1500 | Introduction to Sociology | 3 |
| Social and Personal Awareness (6 s.h.) | | |
| FNUT 1551 | Normal Nutrition | 3 |
| One additional SPA course (3700 level) | | 3 |

### Major Requirements

| BIOL 1551 & 1551L | Anatomy and Physiology 1 and Anatomy and Physiology 1 Laboratory | 4 |
| & 1552L | Anatomy and Physiology 2 and Anatomy and Physiology 2 Laboratory | 4 |
| FNUT 1512 | Food Safety and Sanitation | 1 |
| FNUT 1553 & 1553L | Food Science and Management Principles and Food Science and Management Principles Laboratory | 4 |
| FNUT 2600 | Orientation to Dietetics Major | 1 |
| FNUT 2603 & 2603L | Medical Nutrition Therapy 1 and Medical Nutrition Therapy 1 Lab | 4 |
| FNUT 2612 & 2612L | Food Systems: Operation, Production, and Service and Food Systems: Operations, Production, and Service Laboratory | 5 |
| FNUT 2652L | Nutrition Assessment Laboratory | 1 |
| CHFM 3731 | Individual and Family Development | 3 |
| FNUT 3735 | Nutritional Biochemistry | 2 |

### First Year Requirement - Student Success

<table>
<thead>
<tr>
<th>TITLE</th>
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</thead>
<tbody>
<tr>
<td>YSU 1500</td>
<td>Success Seminar</td>
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<td>or SS 1500</td>
<td>Strong Start Success Seminar</td>
</tr>
<tr>
<td>or HONR 1500</td>
<td>Intro to Honors</td>
</tr>
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</table>

### Additional Accreditation Required Courses

| ACCT 1503 | Elementary Accounting | 3 |
| BIOL 1560 & 1560L | Microbiology for the Health Professions and Microbiology Laboratory for Health Professions Lecture | 3 |
| COUN 2651 | Foundations of Helping Skills for Human Ecology Professionals | 2 |
| MGT 3725 | Fundamentals of Management | 3 |
| MATC 1501 | Medical Terminology | 3 |

### Electives to meet 120 hours

<table>
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<tbody>
<tr>
<td>SOC 3745</td>
<td>Sociology of Health, Illness, and Healthcare</td>
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<tr>
<td>GEOG 2626</td>
<td>World Geography</td>
</tr>
<tr>
<td>PSYC 3700</td>
<td>Social Psychology</td>
</tr>
<tr>
<td>PHLT 1531</td>
<td>Fundamentals of Public Health</td>
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<tr>
<td>PHIL 2628</td>
<td>Business Ethics</td>
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<tr>
<td>SPAN 1550</td>
<td>Elementary Spanish</td>
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### Total Semester Hours

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<tr>
<th>Year 1</th>
<th>S.H.</th>
</tr>
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<tbody>
<tr>
<td>Fall</td>
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<tr>
<td>YSU 1500</td>
<td>Success Seminar</td>
</tr>
<tr>
<td>ENGL 1550</td>
<td>Writing 1 (F,S,X)</td>
</tr>
<tr>
<td>BIOL 1551</td>
<td>Anatomy and Physiology 1</td>
</tr>
<tr>
<td>BIOL 1551L</td>
<td>Anatomy and Physiology 1 Laboratory</td>
</tr>
<tr>
<td>FNUT 1551</td>
<td>Normal Nutrition (F,S,X)</td>
</tr>
<tr>
<td>FNUT 2600</td>
<td>Orientation to Dietetics Major</td>
</tr>
</tbody>
</table>

### Spring

| BIOL 1552 | Anatomy and Physiology 2 (F,S,X) | 4 |
| BIOL 1552L | Anatomy and Physiology 2 Laboratory | 4 |
| ENGL 1550 | Writing 2 (F,S,X) | 3 |
| CHEM 1510 | Chemistry for the Allied Health Sciences | 4 |
| CHEM 1510L | Chemistry for the Allied Health Sciences Laboratory | 0 |
| PSYC 1560 | General Psychology (F,S,X) | 3 |

### Bachelor of Science in Applied Science in Food and Nutrition Didactic Program in Dietetics
Bachelor of Science in Applied Science in Exercise Science

Program Director

Garrett Kellar
gkellar@ysu.edu

Overview

The Department of Kinesiology and Sport Science offers a Bachelor of Science in Applied Science degree with a major in exercise science. This program prepares students for certification through the American College of Sports Medicine (ACSM) as a Certified Exercise Physiologist (EP) and the National Strength & Conditioning Association (NSCA) as a Certified Strength and Conditioning Specialist (CSCS).

As such, graduates will be able to design safe and effective exercise prescriptions and conduct individual exercise programs, fitness testing, and health education for low- to moderate-risk individuals, individuals with controlled diseases, and individuals in special populations (e.g. pregnancy, hypertension, and osteoporosis).

Graduates are employed in a wide variety of settings that include:

- medically based wellness programs
- corporate wellness programs
- strength and conditioning
- clinical rehabilitation programs such as cardiac rehabilitation
- public and private fitness clubs

In addition, the program serves as a strong foundation for students wishing to pursue advanced degrees in the field of exercise science or enter professional schools such as:

- Athletic Training
- Physical Therapy
- Occupational Therapy
• Physician Assistant
• Medical school
• Graduate degree in Exercise Science/Physiology

**Admission**

Application forms and other information for formal admittance to the Department of Kinesiology and Sport Science may be obtained in the department office, Room 307, Beeghly Center. This program can be completed in eight semesters if students average 16 hours per semester.

For individual semester advisement, including general education, minor, and additional requirements, see assigned departmental advisor.

For more information, visit Exercise Science - B.S. in Applied Science (http://www.ysu.edu/academics/bitonte-college-health-and-human-services/exercise-science-major/).

The following are KSS courses required in the major for this degree:

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KSS 4880 Internship 8

Additional Courses Needed 7

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**Total Semester Hours** 120-128

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**Semester Hours** 17

**Year 2**

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**Semester Hours** 14

**Year 3**

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**Semester Hours** 16
### Bachelor of Science in Applied Science Exercise Science - Graduate Track

**Program Director:** Garrett Kellar (ggkellar@ysu.edu)

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**Total Semester Hours**: 128-131

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### Learning Outcomes

The student learning outcomes for the BSAS in exercise science are as follows:

1. Students will demonstrate knowledge and skills in health, fitness, and performance assessment.

2. Students will demonstrate skills in risk factor and health risk identification and the ability to prescribe and implement exercise safely in healthy individuals, special populations (e.g., older adults) and individuals with controlled cardiovascular, pulmonary, and metabolic diseases and other clinical populations.

3. Students will demonstrate competency in effectively educating, exercise counseling and using behavioral strategies in individuals regarding lifestyle modification.

4. Students will demonstrate competency in the legal and professional tasks related to the field.

5. Students will demonstrate knowledge of implementing management policies related to the field.

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### Major Required Courses

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**Required additional courses (9 s.h.)**

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**Additional recommended graduate prep courses. Check your specific graduate program requirements.**

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**Total Semester Hours**: 128-131

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### Not required for MAT at YSU.

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### Year 1

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**Semester Hours**: 17

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### Spring

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Bachelor of Science in Applied Science Exercise Science - MAT Track

Program Director: Garrett Kellar (ggkellar@ysu.edu)

Standard Curriculum:

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<td>PSYC 1560</td>
<td>General Psychology</td>
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<tr>
<td>FNUT 1551</td>
<td>Normal Nutrition</td>
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<tr>
<td>KSS 1595</td>
<td>Introduction to Kinesiology and Sport Science (FYE Course)</td>
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<td>KSS 15XX</td>
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<td>Sports First Aid and Injury Prevention</td>
<td>3</td>
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<td>Pedagogical Aspects of Exercise Science</td>
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<tr>
<td>BIOL 2601</td>
<td>General Biology: Molecules and Cells</td>
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<td>KSS 3700</td>
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<tr>
<td>KSS 3705</td>
<td>Statistics Research in Exercise Science</td>
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<tr>
<td>BIOL 3730</td>
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<tr>
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<tr>
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<tr>
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<td>KSS 4805</td>
<td>Administration of Exercise Programs</td>
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<td>Introduction to Human Gross Anatomy</td>
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<tr>
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<td>Physiology of Exercise</td>
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<td>Physiology of Exercise Laboratory</td>
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<tr>
<td>KSS 3720</td>
<td>Kinesiology and Applied Anatomy</td>
<td>4</td>
</tr>
<tr>
<td>KSS 4805</td>
<td>Administration of Exercise Programs</td>
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<tr>
<td>BIOL 3705</td>
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<td>KSS 3730</td>
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<td>KSS 3760</td>
<td>Strength Training and Conditioning</td>
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<tr>
<td>A&amp;H Elective</td>
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<td>3</td>
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<tr>
<td>SS Elective</td>
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<tr>
<td>SPA Elective</td>
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<td>Elective</td>
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<td><strong>Spring</strong></td>
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<tr>
<td>KSS 4880</td>
<td>Internship</td>
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<td>KSS 4875</td>
<td>Exercise Counseling and Behavioral Strategies</td>
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<td><strong>Required additional courses. Credit hours do not count as part of the major. Hrs do count toward degree (13 s.h.)</strong></td>
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<tr>
<td>BIOL 2601</td>
<td>General Biology: Molecules and Cells</td>
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<tr>
<td>BIOL 2602</td>
<td>General Biology: Organisms and Ecology</td>
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<td>&amp; 2602L</td>
<td>and General Biology: Organisms and Ecology Laboratory</td>
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<tr>
<td>BIOL 3705</td>
<td>Introduction to Human Gross Anatomy</td>
<td>4</td>
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<td>BIOL 3705L</td>
<td>Introduction to Human Gross Anatomy Laboratory</td>
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<tr>
<td>BIOL 3730</td>
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### MAT Accelerated Program

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Course</th>
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<tbody>
<tr>
<td>Fall</td>
<td>KSS 1500</td>
<td>Level Activity Elective</td>
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<td></td>
<td>MATH 1513</td>
<td>Algebra and Transcendental Function</td>
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<td>ENGL 1550</td>
<td>Writing 1</td>
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<tr>
<td></td>
<td>CMST 1545</td>
<td>Communication Foundations</td>
<td>3</td>
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<tr>
<td></td>
<td>KSS 1595</td>
<td>Introduction to Kinesiology and Sport Science</td>
<td>2</td>
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<td></td>
<td>KSS 1559</td>
<td>Aerobic Conditioning Activities</td>
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**Total Semester Hours:** 16

<table>
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<th>Year 2</th>
<th>Course</th>
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<tbody>
<tr>
<td>Fall</td>
<td>BIOL 2602</td>
<td>General Biology: Organisms and Ecology and General Biology: Organisms and Ecology Laboratory</td>
<td>4</td>
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<td></td>
<td>PHYS 1501</td>
<td>Fundamentals of Physics</td>
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<tr>
<td></td>
<td>PHYS 1501L</td>
<td>Fundamentals of Physics Laboratory 1</td>
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</tr>
<tr>
<td></td>
<td>KSS 3700</td>
<td>Exercise Testing and Prescription 1</td>
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<tr>
<td></td>
<td>PSYC 1560</td>
<td>General Psychology</td>
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<td>A&amp;H Elective</td>
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**Total Semester Hours:** 19

<table>
<thead>
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<tbody>
<tr>
<td></td>
<td>BIOL 3730</td>
<td>Human Physiology</td>
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</tr>
<tr>
<td></td>
<td>FNUT 1551</td>
<td>Normal Nutrition</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>KSS 3720</td>
<td>Kinesiology and Applied Anatomy</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>KSS 2605</td>
<td>Sports First Aid and Injury Prevention</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>KSS 3705</td>
<td>Statistics Research in Exercise Science</td>
<td>3</td>
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</tbody>
</table>

**Total Semester Hours:** 18

<table>
<thead>
<tr>
<th>Year 3</th>
<th>Course</th>
<th>Title</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>A&amp;H Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>KSS 3710</td>
<td>Physiology of Exercise</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>KSS 3710L</td>
<td>Physiology of Exercise Laboratory</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>KSS 3730</td>
<td>Exercise Testing and Prescription 2</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>KSS 4875</td>
<td>Exercise Counseling and Behavioral Strategies</td>
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</table>

**Total Semester Hours:** 16

### Minor in Wellness

<table>
<thead>
<tr>
<th>Course</th>
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</thead>
<tbody>
<tr>
<td>Required</td>
<td>FNUT 1551</td>
<td>Normal Nutrition</td>
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<tr>
<td></td>
<td>KSS 1590</td>
<td>Foundations of Fitness</td>
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<tr>
<td></td>
<td>PHLT 1568</td>
<td>Healthy Lifestyles</td>
</tr>
<tr>
<td></td>
<td>KSS 2605</td>
<td>Sports First Aid and Injury Prevention</td>
</tr>
<tr>
<td></td>
<td>KSS 4875</td>
<td>Exercise Counseling and Behavioral Strategies</td>
</tr>
</tbody>
</table>

**Total Semester Hours:** 157
Choose any two KSS activity classes. These classes include but are not limited to:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>KSS 1509</td>
<td>Meditation</td>
<td>1</td>
</tr>
<tr>
<td>KSS 1552</td>
<td>Yoga</td>
<td>1</td>
</tr>
<tr>
<td>KSS 1557</td>
<td>Weight Training</td>
<td>1</td>
</tr>
<tr>
<td>KSS 1565</td>
<td>Self Defense</td>
<td>1</td>
</tr>
<tr>
<td>KSS 1550</td>
<td>Pilates</td>
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</tr>
<tr>
<td>KSS 1508</td>
<td>Group Cycling</td>
<td>1</td>
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Choose one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>PHLT 3791</td>
<td>Community Health</td>
</tr>
<tr>
<td>FNUT 5862</td>
<td>Food and Culture</td>
</tr>
<tr>
<td>KSS 3725</td>
<td>Mindfulness</td>
</tr>
<tr>
<td>AHLT 5840</td>
<td>Comparative Health Systems</td>
</tr>
</tbody>
</table>

**Total Semester Hours - 21-22**

### Bachelor of Arts in Gerontology

#### Program Director

Dr. Daniel Van Dussen  
(330) 941-1683  
djvandussen@ysu.edu

#### Overview

Gerontology is the interdisciplinary study of aging and is a rapidly growing field. The gerontology major prepares the students for a career in the field of aging. Since aging is a multifaceted, complex phenomenon, an interdisciplinary training in gerontology will give students an edge in working in the field of aging. The field of aging provides diverse occupational opportunities in health professions, non-profit organizations, recreation and leisure, for-profit businesses, education, research, government, and service providers. Settings include community, human service and religious organizations, government agencies, health and long-term care facilities, retirement communities, academic and research settings, business, industry, legal, and professional organizations.

**General Education Requirements**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>S.H.</th>
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</thead>
<tbody>
<tr>
<td>ENGL 1550</td>
<td>Writing 1</td>
<td>3-4</td>
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<tr>
<td>ENGL 1551</td>
<td>Writing 2</td>
<td>3</td>
</tr>
<tr>
<td>CMST 1545</td>
<td>Communication Foundations</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics requirement (met with MATH 2523)</td>
<td>3</td>
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</table>

Some courses are categorized in more than one knowledge domain. Courses can only be used once with the GE model.

**Arts and Humanities (6 s.h.)**

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>YSU 1500</td>
<td>Success Seminar</td>
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<tr>
<td>or SS 1500</td>
<td>Strong Start Success Seminar</td>
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<tr>
<td>or HONR 1500</td>
<td>Intro to Honors</td>
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**Total Semester Hours - 21-22**

**Required Courses (38 s.h.):**

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>GER 1501</td>
<td>Introduction to Gerontology</td>
</tr>
<tr>
<td>GER 3703</td>
<td>Aging and Society</td>
</tr>
<tr>
<td>GER 3755</td>
<td>Theories of Gerontology</td>
</tr>
<tr>
<td>GER 3759</td>
<td>Physical Change and Aging</td>
</tr>
<tr>
<td>GER 4821</td>
<td>Internship in Gerontology</td>
</tr>
<tr>
<td>GER 4850</td>
<td>Research Methods</td>
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<tr>
<td>GER 4851</td>
<td>Capstone in Gerontology</td>
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<tr>
<td>FNUT 3720</td>
<td>Nutrition, Health, and Aging</td>
</tr>
<tr>
<td>PSYC 3758</td>
<td>Lifespan Development</td>
</tr>
<tr>
<td>SOC 3701</td>
<td>Social Statistics</td>
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<tr>
<td>SOC 4801</td>
<td>Later Life Issues</td>
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Select one from the following policy courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>GER 3757</td>
<td>Aging and Social Policy</td>
</tr>
<tr>
<td>POL 3717</td>
<td>Health Care Policy</td>
</tr>
<tr>
<td>SCWK 3730</td>
<td>Social Services and the Aged</td>
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</table>

Select a minimum of 9 s.h. from the following program elective courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>ECON 1504</td>
<td>Economics of Aging</td>
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<tr>
<td>FNUT 4873</td>
<td>Nutrition and Aging</td>
</tr>
<tr>
<td>GER 3745</td>
<td>Sociology of Health, Illness, and Healthcare</td>
</tr>
<tr>
<td>GER 3756</td>
<td>Aging and Ethnicity</td>
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<tr>
<td>GER 3757</td>
<td>Aging and Social Policy</td>
</tr>
<tr>
<td>GER 3758</td>
<td>Long-Term Care</td>
</tr>
<tr>
<td>GER 3790</td>
<td>Aging in Cross-Cultural Perspective</td>
</tr>
<tr>
<td>GER 4804</td>
<td>Family, Health, and Aging</td>
</tr>
<tr>
<td>KSS 3757</td>
<td>Exercise and Aging for Health Professions</td>
</tr>
<tr>
<td>PHLT 3757</td>
<td>Health and Disease</td>
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<td>PHLT 4828</td>
<td>Grant Writing</td>
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<td>POL 3717</td>
<td>Health Care Policy</td>
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<tr>
<td>PSYC 3757</td>
<td>Adult Development</td>
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<td>PSYC 4857</td>
<td>Biopsychological Aspects of Health and Aging</td>
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<td>SCWK 3730</td>
<td>Social Services and the Aged</td>
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<tr>
<td>SOC 3759</td>
<td>Sociology of Dementia</td>
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<tr>
<td>SOC 3760</td>
<td>Sociology of Death and Dying</td>
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</table>

**Total Semester Hours in the Major: 50 s.h.**

Elective hours to complete the degree:

**Total Semester Hours - 120-122**

**Year 1**

**Fall**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>ENGL 1550</td>
<td>Writing 1</td>
<td>3-4</td>
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<td>or ENGL 1549</td>
<td>Writing 1 with Support</td>
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<tr>
<td>GER 1501</td>
<td>Introduction to Gerontology</td>
<td>3</td>
</tr>
<tr>
<td>or PSYC 1560</td>
<td>General Psychology</td>
<td>3</td>
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<td>Foreign Language 1550</td>
<td>Introduction to Gerontology</td>
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<td>SOC 1500</td>
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**Spring**

<table>
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<tbody>
<tr>
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<tr>
<td>PSYC 1560</td>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>or GER 1501</td>
<td>Introduction to Gerontology</td>
<td>3</td>
</tr>
<tr>
<td>CMST 1545</td>
<td>Communication Foundations</td>
<td>3</td>
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<td>Foreign Language 2600</td>
<td>Introduction to Gerontology</td>
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</table>

**Total Semester Hours - 14-15**
**Learning Outcomes**

- Students can demonstrate understanding of the discipline of gerontology and its interdisciplinary approach to aging and society (Disciplinary Knowledge).
- Students can explain the diversity and complexity of aging in our society.
- Students can dispel ageist stereotypes about aging and older adults.
### Bachelor of Science in Applied Science in Long Term Care Administration

#### Required Natural Science Courses:
- **BUS 1500** Exploring Business 3
- **BIOL 1545** Allied Health Anatomy and Physiology 5
- **& 1545L** and Allied Health Anatomy and Physiology Laboratory 3
- **CHEM 1500** Chemistry in Modern Living 3

#### Psychology Coursework (6 s.h.)
- **PSYC 1560** General Psychology 3
- **PSYC 3757** Adult Development 3

#### Social Statistics Course (4 s.h.):
- **SOC 3701** Social Statistics 4

#### Gerontology-Related Coursework (45 s.h.)
- **GERO 1501** Introduction to Gerontology 3
- **GERO 3703** Aging and Society 3
- **GERO 3745** Sociology of Health, Illness, and Healthcare 3
- **GERO 3758** Long-Term Care 3
- **GERO 3761** Elder Crimes - Elder Justice 3
- **GERO 4808** Medical Professions, Nursing & Allied Health Coursework (12 s.h.):
  - **CMST 3756** Communication in Groups and Organizations 3
  - **CMST 2655** Interviewing 3

#### Business & Technology Coursework (30 s.h.)
- **BUS 1500** Exploring Business 3
- **ACCT 2602** Financial Accounting 3
- **ACCT 2603** Managerial Accounting 3
- **CSIS 1514** Business Computer Systems 3
- **ECON 2610** Principles 1: Microeconomics 3
- **FIN 3720** Business Finance 3
- **MGT 3715** Employee Relations and Workplace Ethics 3
- **MGT 3725** Fundamentals of Management 3
- **MGT 3750** Managing Individuals in Organizations 3

#### Select one of the following (3 s.h.):
- **GERO 3757** Aging and Social Policy 3
- **or SCWK 3730** Social Services and the Aged 3

#### Communications Coursework (6 s.h.):
- **CMST 2655** Communication in Groups and Organizations 3
- **CMST 3756** Interviewing 3

#### Medical Professions, Nursing & Allied Health Coursework (12 s.h.):
- **AHLT 4808** Environmental Health Concerns 3
- **FNUT 3720** Nutrition, Health, and Aging 3
- **MATC 1501** Medical Terminology 3
- **PHIL 3725** Biomedical Ethics 3

#### Total semester hours in major: 103 s.h.

### Year 1

#### Fall
- **ENGL 1550** Writing 1 3
- **or ENGL 1549** or Writing 1 with Support 3-4
- **COMS 1514** Communication Foundations 3
- **GERO 3755** Principles of Occupational Safety 3

### Total Semester Hours
- **130-132**

### Year 2

#### Fall
- **ACCT 2603** Managerial Accounting 3
- **FNUT 3720** Nutrition, Health, and Aging 3
- **MG 3715** Employee Relations and Workplace Ethics 3
- **ECON 2610** Principles 1: Microeconomics 3
- **GERO 3758** Long-Term Care 3
- **GERO 3755** Principles of Occupational Safety 3
- **or SCWK 3730** Social Services and the Aged 3
- **Writing 2** 3

### Semester Hours
- **18**

#### Spring
- **GERO 4801** Internship in Gerontology 12
- **CMST 3756** Communication in Groups and Organizations 3
- **GERO 3703** Aging and Society 3
- **CMST 2655** Business Computer Systems 3
- **GERO 3703** Managing Individuals in Organizations 3
- **GERO 3758** Principles of Occupational Safety 3
- **or SCWK 3730** Social Services and the Aged 3

### Semester Hours
- **17**

### Year 3

#### Fall
- **ACCT 2603** Managerial Accounting 3
- **FNUT 3720** Nutrition, Health, and Aging 3
- **MG 3715** Employee Relations and Workplace Ethics 3
- **ECON 2610** Principles 1: Microeconomics 3
- **GERO 3758** Long-Term Care 3
- **GERO 3755** Principles of Occupational Safety 3
- **or SCWK 3730** Social Services and the Aged 3

### Semester Hours
- **18**

#### Spring
- **CMST 3756** Communication in Groups and Organizations 3
- **FIN 3720** Business Finance 3
- **AHLT 4808** Environmental Health Concerns 3
- **SCWK 3730** Social Services and the Aged 3
- **GERO 3755** Principles of Occupational Safety 3
- **or SCWK 3730** Social Services and the Aged 3

### Semester Hours
- **15**

### Year 4

#### Fall
- **GERO 4821** Internship in Gerontology 6
- **MG 3750** Managing Individuals in Organizations 3
- **GERO 4850** Research Methods 3
Bachelor of Science in Applied Science in Long-Term Care Administration Completion

Program Director

Dr. Daniel Van Dussen
(330) 941-1683
djvandussen@ysu.edu

Overview

The Bachelor of Science in Applied Science degree in Long-Term Care Administration prepares students to become specialized, self-critical, accountable administrators in long-term care facilities. Facilities may include home and community-based care, assisted living, nursing homes, hospices, and related health care industries.

There are two options for completion of this degree. The traditional option is a four-year BSAS degree.

The second option is a 64 s.h. degree completion program. Students must enroll at Youngstown State University and transfer the required courses within the major and general education requirements. The remainder of the courses are offered online and will satisfy the final two years of the BSAS degree (64 s.h.).

Students must complete all required coursework for the university and major and have:

• an overall GPA of 2.25
• a “C” or better in all courses in the major
• 1000 hours in an approved internship
• 48 hours of upper-division courses
• 129 hours of coursework overall

A minor is not necessary for this major and the requirements for the 21-semester hour Certificate in Applied Gerontology are fulfilled within the major.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>Psychology Coursework (3 s.h.)</td>
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<tr>
<td>PSYC 3757</td>
<td>Adult Development</td>
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<tr>
<td>Support Coursework Sociology (4 s.h.)</td>
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<tr>
<td>SOC 3701</td>
<td>Social Statistics</td>
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<tr>
<td>Gerontology Coursework (39 s.h.)</td>
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<tr>
<td>GER 3703</td>
<td>Aging and Society</td>
<td>3</td>
</tr>
<tr>
<td>or SCWK 3730</td>
<td>Social Services and the Aged</td>
<td></td>
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<tr>
<td>GER 3757</td>
<td>Aging and Social Policy</td>
<td>3</td>
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<tr>
<td>or SCWK 3730</td>
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<tr>
<td>GER 3745</td>
<td>Sociology of Health, Illness, and Healthcare</td>
<td>3</td>
</tr>
<tr>
<td>SOC 3759</td>
<td>Sociology of Death and Dying</td>
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<tr>
<td>GER 3761</td>
<td>Elder Crimes - Elder Justice</td>
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Semester Hours: 64

Course       Title                                      S.H.
Year 3         
Fall
ACCT 2602     Financial Accounting                    3
SOC 3760      Sociology of Death and Dying             3
PSYC 3757     Adult Development                       3
GER 3703      Aging and Society                        3
GER 3757      Aging and Social Policy                  3
or SCWK 3730  Social Services and the Aged            3
GER 3745      Sociology of Health, Illness, and Healthcare | 3
SOC 3759      Sociology of Death and Dying             3
SOC 3759      Sociology of Dementia                    3
GER 3761      Elder Crimes - Elder Justice             3

Semester Hours: 16

Spring
CMST 3756     Interviewing                            3
AHLT 4808     Environmental Health Concerns            3
SOC 3701      Social Statistics                        4
ACCT 2603     Managerial Accounting                    3
GER 3745      Sociology of Health, Illness, and Healthcare | 3

Semester Hours: 15

Year 4         
Fall
GER 4821      Internship in Gerontology                 6
GER 4850      Research Methods                         3
SOC 3759      Sociology of Dementia                     3
FIN 3720      Business Finance                         3
FNUT 3720     Nutrition, Health, and Aging              3

Semester Hours: 18

Spring
GER 4821      Internship in Gerontology                 6
GER 4851      Capstone in Gerontology                   3
SOC 4801      Later Life Issues                         3
GER 3761      Elder Crimes - Elder Justice              3

Semester Hours: 15

Total Semester Hours: 64

Certificate in Applied Gerontology

Program Director: Dr. Daniel Van Dussen (330) 941-1683 or djvandussen@ysu.edu
Students desiring to pursue the Certificate in Applied Gerontology must complete the following required core and elective courses. Please note: students must also complete required prerequisites to the upper division courses.

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<thead>
<tr>
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<tr>
<td>GER 3703</td>
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<td>SOC 4801</td>
<td>Later Life Issues</td>
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<tr>
<td>PSYC 3757</td>
<td>Adult Development</td>
<td>3</td>
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<td>GER 3759</td>
<td>Physical Change and Aging</td>
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<tr>
<td><strong>Field Work in Gerontology</strong></td>
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<td>GER/SOC 4821</td>
<td>Internship in Gerontology</td>
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<tr>
<td><strong>Electives</strong></td>
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<td>GER 3745</td>
<td>Sociology of Health, Illness, and Healthcare</td>
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<td>GER 3755</td>
<td>Theories of Gerontology</td>
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<tr>
<td>SOC 3758</td>
<td>Long-Term Care</td>
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<td>GER 3757</td>
<td>Aging and Social Policy</td>
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<tr>
<td>SOC 3759</td>
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<td>SOC 3760</td>
<td>Sociology of Death and Dying</td>
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<td>GER 4804</td>
<td>Family, Health, and Aging</td>
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<tr>
<td>SOC 6905</td>
<td>Social Gerontology</td>
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<td>ANTH 3790</td>
<td>Aging in Cross-Cultural Perspective</td>
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<tr>
<td>FNUT 3720</td>
<td>Nutrition, Health, and Aging</td>
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<td>POL 3717</td>
<td>Health Care Policy</td>
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<td>KSS 4870</td>
<td>Exercise and Aging for Health Professions</td>
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<td>GER 4821</td>
<td>Internship in Gerontology</td>
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<td>SCWK 3730</td>
<td>Social Services and the Aged</td>
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<tr>
<td>PSYC 4857</td>
<td>Biopsychological Aspects of Health and Aging</td>
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<td>ECON 1504</td>
<td>Economics of Aging</td>
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<tr>
<td>PSYC 3758</td>
<td>Lifespan Development</td>
<td>3</td>
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</table>

Note: The Certificate in Applied Gerontology comprises 21 semester hours. Students must maintain a "C" or better in all course work, must satisfy all prerequisites, and cannot take a course on a "CR/NC" basis.

### Minor in Gerontology

Program Director: Dr. Daniel Van Dussen (330) 941-1683 or djvandussen@ysu.edu

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
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<tbody>
<tr>
<td><strong>Required Courses</strong></td>
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<tr>
<td>GER 1501</td>
<td>Introduction to Gerontology</td>
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<tr>
<td>or SOC 1500</td>
<td>Introduction to Sociology</td>
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<tr>
<td>Select five of the following:</td>
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<tr>
<td>GER 3703</td>
<td>Aging and Society</td>
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<td>GER 3755</td>
<td>Theories of Gerontology</td>
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<td>GER 3756</td>
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<td>GER 3757</td>
<td>Aging and Social Policy</td>
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<td>SOC 4801</td>
<td>Later Life Issues</td>
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<td>GER 4804</td>
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<td>GER 4821</td>
<td>Internship in Gerontology</td>
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<tr>
<td>SOC 3759</td>
<td>Sociology of Dementia</td>
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<tr>
<td>FNUT 3720</td>
<td>Nutrition, Health, and Aging</td>
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</table>

Total Semester Hours 18

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### Associate of Applied Science in Hospitality Management, Event Management Track

Mark J. Zetts, MBA  
AAS- Hospitality Management Program Director  
(330) 941-1784  
mjzetts01@ysu.edu

Students may earn an associate degree and/or a bachelor's degree with a major in hospitality management. The hospitality management programs provide students with the knowledge and skills needed to be successful and competent in this fast-growing field, not only in the United States but throughout the world.

The Associate of Applied Science degree articulates with the bachelor’s degree. The Bachelor of Science in Applied Science program exposes students to advanced management concepts in lodging, food and beverage, or event management.

The Event Management track provides coursework to prepare graduates to plan leisure activities, sporting events and other celebrations from arranging food and entertainment to reserving venues and accommodations for guests.

The Restaurant and Foodservice track prepares graduates for managing restaurant or institutional food service operations.

The Hotel and Lodging track prepares graduates for careers in the lodging area of hospitality - cruise ships, resorts, and hotels.

For more information, contact Mr. Mark Zetts at mjzetts01@ysu.edu or (330) 941-1784

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
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<td><strong>General Education Requirements</strong></td>
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<td>Core Competencies</td>
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<tr>
<td>ENGL 1550</td>
<td>Writing 1</td>
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<tr>
<td>ENGL 1551</td>
<td>Writing 2</td>
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<tr>
<td>CMST 1545</td>
<td>Communication Foundations</td>
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<tr>
<td>MATH 2623</td>
<td>Quantitative Reasoning</td>
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<td>HAHS 1500</td>
<td>Strong Start FYE</td>
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<td>Arts and Humanities</td>
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<td>Social Science</td>
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<tr>
<td><strong>Other Requirements</strong></td>
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<td>CSIS 1514</td>
<td>Business Computer Systems</td>
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<td><strong>Major Requirements</strong></td>
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<tr>
<td>HMEC 1550</td>
<td>Human Ecology Professions</td>
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<td>HMGT 1500</td>
<td>Introduction to Hospitality Industry</td>
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<tr>
<td>FNUT 1512</td>
<td>Food Safety and Sanitation</td>
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<td>FNUT 1551</td>
<td>Normal Nutrition</td>
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<tr>
<td>FNUT 1553</td>
<td>Food Science and Management Principles</td>
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<td>&amp; 1553L</td>
<td>Food Science and Management Principles</td>
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<tr>
<td>Laboratory</td>
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<tr>
<td>HMGT 2603</td>
<td>Hospitality Managerial Accounting 1</td>
<td>4</td>
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<tr>
<td>HMGT 2691</td>
<td>Hospitality Cooperative Work Experience</td>
<td>3</td>
</tr>
<tr>
<td>&amp; Permit required, see advisor. Student must sign up for permit</td>
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<tr>
<td>prior to registration.</td>
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<td>HMGT 3719</td>
<td>Facilities Management</td>
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</tr>
<tr>
<td>HMGT 3745</td>
<td>Hospitality Marketing and Sales</td>
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</table>

**Event Management**
At the completion of the hospitality management program, graduates will be able to:

- Demonstrate appropriate customer and guest service practices, skills and behaviors required during customer involvement that contribute to customer satisfaction.
- Demonstrate the knowledge of fundamental principles of leadership and the ability to work with a group of people to formulate rational solutions to hospitality operational problems.
- Demonstrate quality food preparation and presentation skills, using appropriate health, safety, sanitation, and environmental protection procedures in hospitality.
- Demonstrate the use and knowledge of current technologies in the hospitality industry. Explain key factors in the design, development, and maintenance of the industry facilities and apply relevant technologies in ways that enhance organizational performance.
- Demonstrate the ability to market hospitality goods and services effectively and responsibly.
- Analyze legal, ethical, and socio-political considerations affecting organizations to make management decisions.
- Demonstrate use of accepted accounting practice and sound financial management.

### Learning Outcomes

**Associate of Applied Science in Hospitality Management, Hotel and Lodging Management Track**

Mark J. Zetts, MBA  
AAS- Hospitality Management Program Director  
330-941-1784  
mzetts01@ysu.edu

Students may earn an associate degree and/or a bachelor’s degree with a major in hospitality management. The hospitality management programs provide students with the knowledge and skills needed to be successful and competent in this fast-growing field, not only in the United States but throughout the world.

The Associate of Applied Science degree articulates with the bachelor’s degree. The Bachelor of Science in Applied Science program exposes students to advanced management concepts in lodging, food and beverage, or event management.

The Hotel and Lodging track provides coursework to prepare graduates to manage all aspects of providing accommodations and lodging services for guests.

### Learning Outcomes

At the completion of the hospitality management program, graduates will be able to:

- Demonstrate appropriate customer and guest service practices, skills and behaviors required during customer involvement that contribute to customer satisfaction.
- Demonstrate the knowledge of fundamental principles of leadership and the ability to work with a group of people to formulate rational solutions to hospitality operational problems.
- Demonstrate quality food preparation and presentation skills, using appropriate health, safety, sanitation, and environmental protection procedures in hospitality.
- Demonstrate the use and knowledge of current technologies in the hospitality industry. Explain key factors in the design, development, and maintenance of the industry facilities and apply relevant technologies in ways that enhance organizational performance.
- Demonstrate the ability to market hospitality goods and services effectively and responsibly.

### Associate of Applied Science in Hospitality Management, Hotel and Lodging Management Track

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Semester Hours</th>
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<tr>
<td>Fall</td>
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<tr>
<td>HMEC 1550 Human Ecology Professions</td>
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<td>HMGT 1600 Introduction to Hospitality Industry</td>
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<td>ENGL 1550 Writing 1</td>
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<td>FNUT 1512 Food Safety and Sanitation</td>
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<td>FNUT 1553 Food Science and Management Principles</td>
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<tr>
<td>FNUT 1553L Food Science and Management Principles Laboratory</td>
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<td>MATH 2623 Quantitative Reasoning</td>
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<td>HAHS 1500 Strong Start FVE</td>
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<tr>
<td>Spring</td>
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<tr>
<td>FNUT 2610 or MGT 3725 Organization and Management (GPA &gt; 2.5 required for MGT 3725) or Fundamentals of Management</td>
<td>3</td>
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<tr>
<td>ENGL 1551 Writing 2</td>
<td>3</td>
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<tr>
<td>FNUT 2612 Food Systems: Operation, Production, and Service</td>
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<tr>
<td>FNUT 2612L Food Systems: Operation, Production, and Service Laboratory</td>
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<td>CSIS 1514 Business Computer Systems</td>
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<td><strong>Total Semester Hours</strong></td>
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<th>Year 2</th>
<th>Semester Hours</th>
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<td>HMGT 3719 Facilities Management</td>
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<td>HMGT 3745 Hospitality Marketing and Sales</td>
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<td>Arts &amp; Humanities or Natural Science Elective</td>
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<td><strong>Total Semester Hours</strong></td>
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<td>CMST 1545 Communication Foundations</td>
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<td>HMGT 4846 Event Management</td>
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<td>HMGT 2691 Hospitality Cooperative Work Experience</td>
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<td>Social Science Elective</td>
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### Total Semester Hours

- **60**
- Analyze legal, ethical, and socio-political considerations affecting organizations to make management decisions.
- Demonstrate use of accepted accounting practice and sound financial management.

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<tr>
<td>YSU 1500</td>
<td>Success Seminar</td>
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<td>or SS 1500</td>
<td>Strong Start Success Seminar</td>
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<tr>
<td>or HONR 1500</td>
<td>Intro to Honors</td>
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<td>ENGL 1550</td>
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<td>or ENGL 1549</td>
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<tr>
<td>CMST 1545</td>
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<tr>
<td>MATH 2623</td>
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<td>Select 2 courses from 2 domains: Natural Sciences (one must include a lab), Social Science, A&amp;H</td>
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<tr>
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<td>HMG 2603</td>
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<td>HMG 2691</td>
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<tr>
<td>HMG 3719</td>
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<tr>
<td>HMG 3745</td>
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<tr>
<td>Hotel and Lodging Management</td>
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<td>HMG 2622</td>
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<td>HMG 3734</td>
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<td>Electives</td>
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| Total Semester Hours | 60-62 |

Some courses offered only once a year; see your advisor for proper prerequisites and sequence of courses. This curriculum articulates perfectly with the Bachelor of Science program in Applied Science in hospitality management. See your advisor regarding prerequisites for ACCT, MGT, and MKTG courses.

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| Semester Hours | 15   |

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<td>HMG 3719</td>
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| Semester Hours | 15   |

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<td>Elective - 1 s.h.</td>
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| Semester Hours | 13   |

| Total Semester Hours | 59   |

**Department of Military Science**

**Army Reserve Officer Training Corps (ROTC)**

The Army Reserve Officer Training Corps (ROTC) is a college leadership program designed to train college students in leadership and management skills, equipping them for leadership in the United States Army.

Army ROTC is not a college major, but the Army ROTC program is compatible with most baccalaureate degree producing programs at Youngstown State University.

The Military Science Department (Army ROTC) has served the University and the nation since 1949 by preparing students for service as professional Officers in the United States Army. The military science program at YSU offers a four-year course of study that adds practical management training and leadership experience to students’ chosen degrees.

The Army ROTC program expands a student’s education by providing leadership and management experience. This training helps students develop self-discipline, physical stamina, and poise - qualities basic to success in any worthwhile career. Students genuinely interested in military service can earn a commission as a Second Lieutenant in the U.S. Army (which includes the Active Army, Army National Guard, and Army Reserve) while earning their college degree. Through ROTC, the Army gains Officers with diverse educational backgrounds and contemporary ideas.

Students who have career goals outside the Army that require leadership or managerial skills, and who wish to explore the benefits of the Army, are encouraged to enroll in the introductory lower-division Military Science courses. These courses can be applied as elective credit toward your degree. Participation in these classes is voluntary and carries no military obligation.

Army ROTC is one of the programs at YSU that provides leadership training. In Army ROTC, students quickly gain the confidence and self-discipline necessary to succeed in college. As they progress, students acquire skills and experience in taking charge of activities, setting goals, managing people and resources, and making decisions in demanding circumstances. When they complete the
Army ROTC program and graduate from YSU, students will have gained both leadership and academic credentials necessary to take on responsibility as Army Officers and/or step into corporate America. A minor in Military Science is available in consultation with the academic major advisor and the Military Science Department.

Scholarships

The Army ROTC program offers four, three, and two year scholarships to those that qualify (subject to availability). Scholarships include full tuition, a monthly stipend of $300 - $500 and a $1200 book allowance. These scholarships incur a military obligation.

Youngstown State University Army ROTC also offers various alumni and endowment scholarships which are offered to students without any military obligation. Students interested in these scholarships can apply through the Army ROTC Department.

Opportunities for Veterans/Junior ROTC Graduates

Military Veterans and students with three years of Junior ROTC (high school), are eligible for Basic Course class credit (first two years of the ROTC program). These students may be eligible to begin the ROTC program in the Advanced Course (beginning with their junior year). Check with the Military Science Department for Advanced Course requirements.

Army ROTC/Army Reserve/Army National Guard

Students can further broaden their college experience and earn extra income by combining ROTC with service in the Army Reserve or Army National Guard through the Simultaneous Membership Program (SMP). Students who qualify may join the Army Reserve or Army National Guard unit as an Officer trainee and simultaneously enroll in the Army ROTC Advanced Course. In addition to ROTC allowances for contracted students, SMP participants are paid for their Reserve or Guard drills and annual summer training sessions. Contact the Military Science Department for details.

Leadership Laboratory

The leadership laboratory is a practical exercise period for both Basic and Advanced courses. It provides hands-on experience in practical military skills and the development of essential characteristics of leadership through progressive evaluation and counseling:

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<tr>
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<tbody>
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<td>MSCI 2630L</td>
<td>Basic Course Leadership Laboratories</td>
<td>0</td>
</tr>
<tr>
<td>MSCI 3730L</td>
<td>Advanced Course Leadership Laboratories</td>
<td>0</td>
</tr>
<tr>
<td>MSCI 4830L</td>
<td>Advanced Course Leadership Laboratories</td>
<td>0</td>
</tr>
</tbody>
</table>

Extra-Curricular Activities

Cadets have numerous opportunities to participate in ROTC activities outside the classroom. During YSU home football games, YSU Cadets raise the national colors, and mark every Penguin score by firing the cannon and doing push-ups for the fans. Additionally, the Color Guard Team provides color guards for university and community events. Army ROTC Cadets also have the opportunity to participate in field training exercises at Camp Ravenna Joint Military Training Center which tests their land navigation and tactical leadership skills. Cadets also participate in Combat Water Survival Training, formal military banquets and ceremonies, and weekly "hands-on" leadership labs.

Cadets may have the opportunity to earn the German Armed Forces Badge for Military Proficiency by completing a fitness test, pistol qualification, demonstrating proficiency in first aid, and completing a road march. Cadets who qualify may also participate in the annual Army Ten Miler in Washington, DC, or honor fallen soldiers and their families at the Mountain Man Memorial March in Gatlinburg, TN.

For more information contact the Department of Military Science:

Email at: armyrotc@ysu.edu
Phone: 330.941.3205
Instagram: ysu_rotc
Facebook: YSU Army ROTC (https://www.facebook.com/YSUArmyROTC/)

visit the Department of Military Science

Majors

- Military Science Four Year Program (p. 406)
- Military Science Two Year Program (p. 407)

Minors

- Minor in Military Science (p. 407)
- Minor in Military Science History Track (p. 407)
- Minor in Military Science Political Science Track (p. 407)

**MSCI 1510 Introduction to ROTC** 1 s.h.
Team and individual study and activities in basic drill, physical fitness, rappelling, leadership recreation course, first aid, making presentations, and basic marksmanship. Fundamental concepts of leadership in a profession in both classroom and outside laboratory environments. One hour lecture and Leadership Laboratory MSCI 1530L per week.

**MSCI 1520 Introduction to Leadership** 1 s.h.
Learn/apply principles of effective leading. Reinforce self-confidence through participation in physically and mentally challenging exercises. Develop communication skills to improve individual performance and group interaction. Relate organizational ethical values to the effectiveness of a leader. One hour lecture and Leadership Laboratory MSCI 1530L per week.

**MSCI 1530L Basic Course Leadership Laboratories** 0 s.h.
Practical exercises with different roles for students at different levels in the program. Build self-confidence, and team-building leadership skills that can be applied throughout life. Open only to (and required of) students in the respective MSCI courses. For MSCI 1510 and MSCI 1520 it is MSCI 1530L.

**MSCI 2610 Self Team Development** 2 s.h.
Apply ethics-based leadership skills that develop individual abilities and contribute to the building of effective teams. Develop skills in oral presentations, writing concisely, planning of events, coordination of group efforts, advanced first aid, land navigation, and basic military tactics. Fundamentals of ROTC’s Leadership Development Program. Two hours lecture and leadership lab MSCI 2630L per week.

**MSCI 2620 Individual/Team Military Tactics** 2 s.h.
Introduction to individual and team aspects of military tactics in small unit operations. Includes use of radio communications, safety assessments, movement techniques, planning for team safety/security and methods of pre-execution checks. Practical exercises with upper-division ROTC students. Techniques for training others. Two hours lecture and leadership lab MSCI 2630L per week.

**MSCI 2630L Basic Course Leadership Laboratories** 0 s.h.
Practical exercises with different roles for students at different levels in the program. Build self-confidence, and team-building leadership skills that can be applied throughout life. Open only to (and required of) students in the respective MSCI courses. For MSCI 2610 and MSCI 2620 it is MSCI 2630L.
The four-year Army ROTC program is divided into two parts:

MSCI 2640  Basic ROTC Summer Camp Challenge  3 s.h.
A five-week summer camp conducted at an army post. The student receives pay. Travel, lodging, and most meal costs are defrayed by the Army. The environment is rigorous, and similar to Army Basic Training. No military obligation is incurred.

MSCI 2650  American Military Operations  2 s.h.
American Military Operations teaches the development and implementation of United States Army doctrine, philosophy, strategy, tactics, logistics, leadership, and battle and campaign analysis in an historical context.

MSCI 3710  Leading Small Organizations 1  3 s.h.
Practical opportunities to lead small groups and lead again in situations of increasing complexity. Uses small unit tactics and opportunities to plan and conduct training for lower-division students both to develop such skills and as vehicles for practicing leading. Three hours lecture and leadership lab MSCI 3730L per week.
Prereq.: Permission of department chairperson.

MSCI 3720  Leading Small Organizations 2  3 s.h.
Continues methodology of MSCI 3710. Analyze tasks; prepare written/oral guidance for team to accomplish tasks. Delegate tasks and supervise. Plan for the unexpected in organizations under stress. Apply lessons from leadership studies. Examine importance of ethical decision making in setting a positive climate that enhances team performance. Three hours lecture and leadership lab MSCI 3730L per week.
Prereq.: Permission of department chairperson.

MSCI 3730L  Advanced Course Leadership Laboratories  0 s.h.
Practical exercises with different roles for students at different levels in the program. Involves leadership responsibilities for the planning, coordination, execution, and evaluation of training and activities. Open only to students in the respective MSCI courses. For MSCI 3710 and MSCI 3720 it is MSCI 3730L.

MSCI 3740  ROTC Advanced Camp  4 s.h.
A five-week camp conducted at an Army post. Student receives pay. Travel, lodging and meal costs are defrayed by the Army. The Advanced Camp environment is structured and demanding, stressing leadership at small unit levels under varying conditions. Individual leadership and basic skills performance are evaluated.

MSCI 3750  Individual Study 1-3 s.h.
The individual study of a particular military problem or review of the literature relating to a specific military problem. May be repeated with a different problem for a maximum of 3 s.h.
Prereq.: Six s.h. of Military Science and consent of the instructor.

MSCI 4810  Leadership Challenges and Goal-Setting  3 s.h.
Plan, conduct and evaluate activities of the ROTC cadet organization. Develop strategies to improve it. Develop confidence in skills to lead people and manage resources. Learn/apply various Army policies and programs. Two hours lecture and leadership lab MSCI 4830L per week.
Prereq.: Permission of department chairperson.

MSCI 4820  Transition to Lieutenant  3 s.h.
Continues the methodology from MSCI 4810. Identify and resolve ethical dilemmas. Refine counseling and motivation techniques. Examine aspects of tradition and law as related to leading as an officer in the Army. Prepare for a future as a successful Army lieutenant. Two hours lecture and leadership lab MSCI 4830L per week.
Prereq.: Permission of department chairperson.

MSCI 4830L  Advanced Course Leadership Laboratories  0 s.h.
Practical exercises with different roles for students at different levels in the program. Involves leadership responsibilities for the planning, coordination, execution, and evaluation of training and activities. Open only to students in the respective MSCI courses. For MSCI 4810 and MSCI 4820 it is MSCI 4830L.

The Basic Course is usually taken during the freshman and sophomore years:

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<tr>
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<tr>
<td>MSCI 1510</td>
<td>Introduction to ROTC</td>
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<tr>
<td>MSCI 1520</td>
<td>Introduction to Leadership</td>
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<tr>
<td>MSCI 2610</td>
<td>Self Team Development</td>
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</tr>
<tr>
<td>MSCI 2620</td>
<td>Individual/Team Military Tactics</td>
<td>2</td>
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</table>

No military obligation is incurred during this time. After completing the Basic Course, students who have demonstrated officer potential and meet physical and scholastic standards are eligible to enroll in the Advanced Course.

The Advanced Course includes:

- Junior and Senior Years
  - MSCI 3710  Leading Small Organizations 1  3 s.h.
  - MSCI 3720  Leading Small Organizations 2  3 s.h.
  - MSCI 4810  Leadership Challenges and Goal-Setting  3 s.h.
  - MSCI 4820  Transition to Lieutenant  3 s.h.

- Summer between MS III and MS IV (junior and senior years)
  - MSCI 3740  ROTC Advanced Camp  4 s.h.

All students in the Advanced Course receive uniforms and a monthly stipend.

Before entering the Advanced Course, an individual signs a contract that certifies an understanding of the service obligation. This obligation may be fulfilled in a variety of ways depending on the individual's personal preference and the needs of the Army at the time of commissioning.

Scholarship graduates incur an eight-year obligation and are required to serve one of the following obligations:
- four years on active duty and four years in an Army Reserve
- six years in National Guard unit then two years in the Individual Ready Reserve (IRR)
- three years on active duty and five years in the IRR
- four years on active duty and four years in the IRR
- eight years in Army Reserve or National Guard unit

Non-scholarship graduates are required to serve one of the following obligations:
- two years on active duty and six years in the IRR
- three years on active duty and five years in the IRR
- four years on active duty and four years in the IRR
- six years in an Army Reserve or National Guard unit and two years in the IRR
- eight years in the IRR

All commissionees incur a service obligation of eight years with service being either full-time active duty or part-time in the Army Reserves or Army National Guard. The mix of active and reserve duty is determined by the needs of the Army, the Cadet’s performance, and the type of contract the Cadet signed (scholarship or non-scholarship, guaranteed Reserve Forces Duty or
participation in the Simultaneous Membership Program of the Army Reserve/Army National Guard). Contact the department to discuss contract details.

The needs of the Army at the time of commissioning. Students entering the Advanced Course (junior year) sign a contract which outlines their service obligation following graduation from YSU. This obligation may be fulfilled in a variety of ways (active duty, Army Reserves, Army ROTC - Two-Year Program

**Army ROTC - Two-Year Program**

There is a two-year Army ROTC program for students that have two years remaining to complete their degree program. This may include transfer students, junior college students, graduate students and any student that has not participated in the Military Science Basic Course (first two years of the program).

By attending the 31 day Army ROTC Basic Camp at Fort Knox, Kentucky, these students are eligible to enter the Advanced Course (junior and senior year). Students attend this course during the summer following their sophomore year (before the start of their junior year). Students desiring to start ROTC in their junior year should contact the Military Science Department for eligibility to attend Basic Camp at Fort Knox, Kentucky.

Students entering the Advanced Course (in their junior year) sign a contract which outlines their service obligation following graduation from YSU. This obligation may be fulfilled in a variety of ways (active duty, Army Reserves, Army National Guard) depending on the individual's personal preference and the needs of the Army at the time of commissioning. Contact the department of Military Science to discuss contract details.

**Minor in Military Science History Track**

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<td>MSCI 1520</td>
<td>Introduction to Leadership</td>
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<td>POL 2660</td>
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<td>POL 3741</td>
<td>Russia and China: From Revolution to Reform</td>
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<td>POL 3763</td>
<td>International Law</td>
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<tr>
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<td><strong>Total Semester Hours</strong></td>
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</table>
**Department of Nursing**

(330) 941-3293

The Department of Nursing offers a Bachelor of Science in Nursing (BSN) degree and a School Nurse Licensure Certificate Program. Graduate programs leading to a Master of Science in Nursing (MSN) degree are also available. Refer to the Graduate Catalog for details.

**Bachelor of Science in Nursing Program**

Two programs are offered: an entry-level (pre-licensure) and an RN-BSN Online Completion program.

The entry-level program is a four-year program for new or transfer students entering YSU without a previous degree or diploma in nursing. The program prepares students for the registered nurse role. Graduates are eligible to sit for the NCLEX-RN examination for licensure as a Registered Nurse.

The RN-BSN Online Completion program is offered for students who are currently licensed as registered nurses and are returning to YSU to complete requirements for a baccalaureate degree. After completing prerequisites, the RN-BSN Online Completion program takes four semesters or more on a part-time basis, depending on the student’s academic background. More details are available under the RN-BSN Online Completion program tab or at https://ysu.edu/academics/bitonte-college-health-and-human-services/online-nursing-rn-bsn-completion-program (https://ysu.edu/academics/bitonte-college-health-and-human-services/online-nursing-rn-bsn-completion-program/).

**Accreditation**

The BSN program is fully approved by the:

Ohio Board of Nursing
17 S. High Street, Suite 400
Columbus, Ohio 43125
phone: (614) 466-3947

The BSN program is fully accredited by:

Commission on Collegiate Nursing Education (CCNE)
655 K Street, NW, Suite 750
Washington, DC 20001
phone: (202) 887-6791

Accreditation Commission for Education in Nursing (ACEN)
3343 Peachtree Road NE, Suite 500
Atlanta, GA 30326
phone: (404) 975-5000

**Admission Requirements for the Entry-level Bachelor of Science in Nursing Program**

Admission into the entry-level BSN degree program is restricted. Entry-level students complete admission requirements as pre-nursing majors before formal admission to the BSN program. Admission to the University provides these students with the opportunity to complete a core of pre-nursing courses after which they may apply and compete for a position in the entry-level Nursing Program. Admission for the entry-level BSN program is held only once a year for Fall registration. Students who are scheduled to complete all admission requirements by the end of spring semester are eligible to apply for fall semester admission. Students who meet all requirements are encouraged to apply however attainment of the minimum GPA does not guarantee admission to the program due to a large applicant pool.

**Guaranteed Admission Eligibility**

First-time freshman students who score a Composite ACT of 24 or an equivalent combined SAT score of 1190 and have an accumulative GPA of 3.4 or above, are guaranteed a position in the entry level BSN program. To maintain this guaranteed position in the entry-level BSN program, these students must maintain a pre-nursing GPA of 3.2 with at least a “C” in all required pre-nursing courses (with no course repetitions). In addition to these grade requirements, all other admission requirements must be met. Students who do not meet the criteria for maintaining their guaranteed position, but meet the general requirements for admission into the entry-level BSN program, will be considered for Fall admission with all other nursing applicants.

**Late Admission Eligibility**

Students who are scheduled to complete all admission requirements by the end of summer semester are eligible to apply for late admission. Late admission applicants will be considered if, and only if, there are program seats available after all earlier submitted applicants have been considered.

**Transfer Students**

Applicants considered for advanced standing include transfer students who were in good standing at the previously attended nursing program and Licensed Practical Nurses (LPNs). LPN applicants must have graduated from an accredited Practical Nurse program and hold a current Practical Nurse license. A total of 11 semester hours of course credit will be given after successful completion of a clinical competency exam. Admission for advanced standing applicants is on a space available basis. Advanced standing applicants must meet all entry-level BSN Admission Requirements. Military credit will be given for electives.

**Applicants for the Entry-level BSN program must meet the following minimum requirements**

1. General University pre-college requirements for the Bachelor of Science degree.
2. Completion of required pre-nursing courses with a grade of “C” or better and a cumulative GPA in these courses of 3.0.
3. A cumulative GPA of 2.5 in all college course work.
4. Evidence of current CPR for Health Care Provider Certification.
5. Completed physical examination and immunization requirements.
6. Annual fingerprinting and drug screen through Corporate screening for BCI and FBI criminal records check.
7. Photocopy of valid YSU ID.

**Required Pre-Nursing courses for entry-level BSN students include**

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<tr>
<th>COURSE</th>
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<tbody>
<tr>
<td>BIOL 1551 &amp; 1551L</td>
<td>Anatomy and Physiology 1 and Anatomy and Physiology 1 Laboratory</td>
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</tr>
<tr>
<td>BIOL 1552 &amp; 1552L</td>
<td>Anatomy and Physiology 2 and Anatomy and Physiology 2 Laboratory</td>
<td>4</td>
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<tr>
<td>CHEM 1510 &amp; 1510L</td>
<td>Chemistry for the Allied Health Sciences and Chemistry for the Allied Health Sciences Laboratory</td>
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<td>PSYC 1560</td>
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<td>PSYC 3758</td>
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<tr>
<td>SOC 1500</td>
<td>Introduction to Sociology</td>
<td>3</td>
</tr>
<tr>
<td>STAT 2625</td>
<td>Statistical Literacy and Critical Reasoning</td>
<td>4</td>
</tr>
</tbody>
</table>

**Total Semester Hours**

31

Admission to the University, meeting minimal program admission requirements, and completion of pre-nursing courses does not guarantee admission into the nursing program. Pre-nursing students are encouraged to seek advisement on a regular basis from the pre-nursing advisor in the Dr. Dominic A. and Helen M. Bitonte College of Health and Human Services Dean’s office.
Enrollment in the RN-BSN Online Completion Program

Students who are currently registered nurses and seeking a BSN degree are admitted on an individual basis. RN-BSN admission is held any semester depending on the student's transferable prerequisites.

See admission requirements at https://cms.ysu.edu/administrative-offices/distance-education/rn-bsn-admissions-information

Registered nurses in the RN-BSN Online Completion program must meet all of the above requirements in addition to being a registered nurse with a current license to practice in Ohio or in the RN’s home state.

Course Enrollment/Scheduling

All nursing courses except NURS 2610 Contemporary Nursing are available only to students formally admitted into the entry-level BSN program. Courses identified in the Schedule of Classes for RNs only are limited to registered nurses enrolled in the RN-BSN Online Completion program.

Many nursing courses include an off-campus clinical component. These courses are designated on the curriculum list with semester hours in parentheses. Example: NURS 3743 Professional Nursing 3 (5(+3x2)). This course has three semester hours of lecture and two semester hours of clinical. Generally, one semester hour of credit is earned for each three clock hours of on-campus laboratory skills instruction and for each three off-campus clock hours of clinical instruction. The exceptions are NURS 3741 Professional Nursing 2 clinical, where it is 2.7 clock hours per semester hour and NURS 4853 Nursing Transitions clinical, where it is four clock hours per semester hour. Personal responsibility for transportation is required for travel to off-campus clinical sites.

Malpractice insurance is required for all clinical nursing experiences and is provided by the University when the student registers for the specified courses. Some risk is inherent to nursing students during their clinical education, but precautions are taken to minimize this risk.

Academic Requirements for the entry-level Bachelor of Science in Nursing Degree

For new students, the entry-level BSN program consists of 122 total semester hours; 71 semester hours are nursing courses plus 90 on-campus lab hours and 960 clinical contact hours at health care facilities and in the community.

Students are responsible for adhering to the prescribed BSN curriculum sequence including, but not limited to, course prerequisites and mandated sequencing of nursing courses. It is also the students' responsibility to see that all graduation requirements for the BSN degree are satisfied. It is recommended that students frequently seek guidance from their nursing advisor. A copy of the BSN curriculum is available from the Department of Nursing. This program can be completed in eight semesters if students adhere to a curriculum schedule of 14-17 credit hours per semester.

After admission to the program, a grade of "C" or better is mandatory for all nursing courses, required non-nursing support courses, required elective, and general education hours. Only one nursing or one non-nursing support course (BIOL 1560 Microbiology for the Health Professions and BIOL 1560L Microbiology Laboratory for Health Professions or FNUT 1551 Normal Nutrition) may be repeated. A repeated course must be successfully completed with a grade of "A," "B," or "C" and all incomplete grades must be removed before progressing in the nursing curriculum. A grade of less than "C" in a second nursing or required non-nursing support course will result in permanent removal from the nursing program.

A Bachelor of Science in Nursing degree will be granted to the student who has completed the required baccalaureate nursing curriculum with a minimum grade point average of 2.00.

The Department of Nursing reserves the right to remove a student from the program when that student's performance in any nursing course is deemed to be unsafe as characterized by dangerous, inappropriate, irresponsible or unethical behavior. The department reserves the right to dismiss a student who, for legal, ethical, academic, emotional, or physical reasons, cannot be advised to continue in the program.

Current immunizations, CPR for Health Care Professionals certification, annual drug screen and fingerpinting, BCI and FBI criminal background checks are required of all nursing students. If the criminal record check reveals an egregious felony, the Ohio Board of Nursing will not consider the applicant for licensure. Please refer to the Ohio Board of Nursing (http://www.nursing.ohio.gov/) website for additional information. Some lesser offenses may impede student placement at a clinical site, which will affect the student's ability to progress in the program. Random drug testing may occur periodically. Students must adhere to a dress code which includes the wearing of specific nurse's uniform for nursing clinical courses. All policies/requirements stated in this Undergraduate Catalog and the BSN Undergraduate Handbook must be adhered to by students throughout the program.

For more information, visit the Department of Nursing.

Chair
Nancy Wagner, D.N.P., Professor, Chair
Professor
Kimberly A. Ballone, D.N.P., Professor
Sheila M. Blank, M.S.N., Assistant Professor
Laura Calcagni, M.S.N., Assistant Professor
Lori Ann Fusco, M.S.N., Assistant Professor
Patricia L. Hoyson, Ph.D., Professor
Susan A. Lisko, D.N.P., Professor
Valerie Marie O’Dell, D.N.P., Professor
Nicole Olshanski, D.N.P., Assistant Professor
Molly Roche, M.S.N., Associate Professor
Cynthia M. Shields, D.N.P., Associate Professor
Mary P. Shortreed, D.N.P., Assistant Professor
Wendy Thomas, M.S.N., Assistant Professor
Amy Weaver, Ph.D., Associate Professor
Lecturer
Edward Comman, D.N.P., Lecturer
Nora Lipscomb, M.S.N., Lecturer
Paula McClusky, M.S.N., Lecturer
Rose Mucci, M.S.N., Lecturer
Teresa Peck, M.S.N., Lecturer

Majors
• BSN for Entry-Level Students (Non-RN) (p. 411)
• BSN for RN Students (RN-BSN Completion) (p. 412)

Licensure
• School Nurse Licensure Program (p. 413)
NURS 2610  Contemporary Nursing  3 s.h.
Concepts related to professional nursing practice including nursing as a developing profession; educational perspectives and patterns; legal and ethical accountability; economic and political aspects; health care delivery systems; and nursing management and leadership roles. Open to nursing and non-nursing majors.

NURS 2643  Health Assessment  4 s.h.
Development of communication and assessment skills for obtaining health data from various age groups, as well as reporting and recording findings. Three hours lecture, three hours clinical experience in a variety of settings per week.

NURS 2643L  Health Assessment Laboratory  0 s.h.
Health Assessment Laboratory.

NURS 2645  Professional Nursing  1 8 s.h.
Applications of the nursing process for the care of clients with emphasis on health assessment, health promotion, and psychosocial and psychomotor skills. Three hours lecture, 15 hours clinical experience in a variety of settings per week.
Prereq.: NURS 2643, NURS 2610, NURS 2646 and BIOL 1560, BIOL 1560L.

NURS 2645L  Professional Nursing 1 Laboratory  0 s.h.
Professional Nursing 1 Laboratory. 0 s.h.

NURS 2646  Pathophysiology  4 s.h.
Concepts related to pathophysiologic mechanisms of illness. Emphasis on application to nursing using the nursing process.
Prereq.: BIOL 1552, BIOL 1552L and CHEM 1506, CHEM 1506L.

NURS 2650  Pharmacology  3 s.h.
Concepts of pharmacology applies to major drug classes. Emphasis on application of nursing process to drug therapy across the lifespan.
Prereq.: NURS 2646.

NURS 3710  Nursing in the Community  5 s.h.
Nursing in the community including families in health and illness needs.
Prereq.: NURS 2645, BSN Entry-level Program.

NURS 3710L  Nursing in the Community Laboratory  0 s.h.
Nursing in the Community Laboratory.

NURS 3720  Professional Nursing  3 s.h.
Concepts related to professional nursing practice for graduates of ADN and diploma programs.
Prereq.: Valid RN Licensure.

NURS 3725  Nursing Informatics  3 s.h.
This course explores nursing and health care informatics and its application to nursing practice and nursing education. Includes technological strategies to access, evaluate and document information and apply skills to patient care in the nursing profession. Development of computer skills to be successful in the online teaching format are included.
Prereq.: admission to online RN-BSN completion program; Valid RN license.

NURS 3730  Culture in Nursing  3 s.h.
Culture in Nursing: Students will develop cultural awareness, assessment, communication and intervention techniques for various Cultures. The application of Culture to the practice of Nursing will be emphasized.
Prereq.: Valid RN Licensure.

NURS 3731  Child Bearing, Family, and Women's Health Nursing  5 s.h.
Family-centered nursing concentrating on health promotion and illness prevention, acute and chronic healthcare needs for parent(s) during the reproductive expanding phase of the family cycle and for women from adolescence through old age. Three hours lecture and six hours clinical experiences in a variety of settings per week.
Prereq.: NURS 3741, BSN Entry-level.

NURS 3731L  Child Bearing, Family, and Women's Health Nursing Laboratory  0 s.h.
Child Bearing, Family, and Women's Health Nursing Laboratory.

NURS 3735  Health Promotion Across the Lifespan  3 s.h.
This course provides the student with a theoretical foundation for wellness, health promotion and disease prevention across the lifespan. The role of the nurse as a health educator and patient advocate for health care and maintenance of health for patients of various ages, their families and groups will be explored. Students will develop a plan of care to ensure healthy lifestyles and promotion of wellness. Three class hours and no clinical hours per week.
Prereq.: Valid RN Licensure.

NURS 3741  Professional Nursing  2  6 s.h.
Principles and practices of health promotion and rehabilitation of clients with acute and chronic health needs. Three hours lecture, nine hours clinical experience in a variety of settings per week.
Prereq.: NURS 2645, BSN Generic Program.

NURS 3741L  Professional Nursing 2 Laboratory  0 s.h.
Professional Nursing 2 Laboratory.

NURS 3743  Professional Nursing  3  5 s.h.
Advanced principles and practices of health promotion and rehabilitation of patients with acute and chronic health needs. Three hours lecture, six hours clinical experience in a variety of settings per week.
Prereq.: NURS 3741, BSN Generic Program.

NURS 3743L  Professional Nursing 3 Laboratory  0 s.h.
Professional Nursing 3 Laboratory.

NURS 3746  Geriatric Health  2 s.h.
An examination of the aging person’s physical changes with implications for determining healthcare needs and for interpreting the impact of these upon the elder’s life and current health practices.
Prereq.: Junior status.

NURS 3747  Individual Studies  1-3 s.h.
The study of special problems or a review of the literature relating to specific problems or issues. May be repeated for a maximum of 6 s.h. with different problems.
Prereq.: Admission to program or permission of department chairperson.

NURS 3749  Nursing Research  3 s.h.
Process of research using reasoning and scientific rigor in critical analysis of nursing research.
Prereq.: STAT 2625, BSN Generic Program.

NURS 3750  Evidence Based Practice  3 s.h.
Process of evidence based practice using research, reasoning and scientific rigor in critical analysis of nursing research. Prereq: STAT 2625, RN-BSN Online Program.

NURS 4804  Health Assessment for RNs  3 s.h.
Increase clinical knowledge and skills in health assessment of clients of various age groups, and the reporting and recording of findings.
Prereq.: admission to online RN-BSN completion program.

NURS 4832  Nursing Care of Children and Families  5 s.h.
Family-centered nursing concentrating on health promotion/illness and prevention and acute/chronic health care needs of the developing child and family. Three hours lecture and six hours clinical experience in a variety of settings per week.
Prereq.: NURS 3743, BSN Generic Program.

NURS 4832L  Nursing Care of Children and Families Laboratory  0 s.h.
Nursing Care of Children and Families Laboratory.

NURS 4840  Complex Care  5 s.h.
High acuity, restorative, and health promoting care of clients with complex health problems. Three hours lecture, six hours clinical experience in a variety of settings per week.
Prereq.: NURS 3743, BSN Generic Program.

NURS 4840L  Complex Care Laboratory  0 s.h.
Complex Care Laboratory.
NURS 4842 Mental Health Nursing 5 s.h.
Mental health theories and strategies as the foundation in the management of individuals, families, and groups experiencing acute and chronic mental illness. Emphasis on the promotion of optimal level functioning and mental wellness. Three hours lecture, six hours clinical experience in a variety of settings per week.
Prereq.: NURS 3743, BSN Generic Program.

NURS 4842L Mental Health Nursing Laboratory 0 s.h.
Mental Health Nursing Laboratory.

NURS 4844 Community Health Nursing 3 s.h.
Synthesis of nursing and public health sciences with emphasis on promotion and maintenance of healthy communities through the assessment and analysis of at-risk population groups. Includes nursing role in health care policy.
Prereq.: NURS 3743, BSN Generic Program.

NURS 4846 Community Health Nursing for RNs 3 s.h.
A synthesis of nursing and public health sciences emphasizing health of communities through assessment analysis of at-risk population groups. Includes nursing role in healthcare policy.
Prereq.: Valid RN license.

Gen Ed
NURS 4852 Senior Capstone Seminar 3 s.h.
Provides students with opportunities to integrate and synthesize nursing knowledge through research, writing, and presentations on current topics and issues. Total experiential learning 20 hours.
Prereq.: RN license.

NURS 4853 Nursing Transitions 4 s.h.
Analysis, synthesis, and evaluation of care delivered by the healthcare team with emphasis on development of leadership and research roles. Two hours lecture and eight hours clinical experience in a variety of settings per week.
Prereq.: NURS 4840 or concurrent, BSN Generic Program.

NURS 4853L Nursing Transitions Laboratory 0 s.h.
Nursing Transitions Laboratory.

NURS 4854 Nursing Leadership 4 s.h.
Analysis, synthesis, and evaluation of care delivered by the healthcare team with emphasis on development of leadership and research roles for the registered nurse. Total experiential learning 40 hours.
Prereq.: Valid RN License.

NURS 4854L Nursing Leadership Laboratory 0 s.h.
Nursing Leadership Laboratory.

NURS 4855 Comprehensive Nursing Summary 2 s.h.
Identifies individual strengths and weaknesses with emphasis on improving students' understanding and demonstration of essential nursing knowledge. Must be taken concurrently with NURS 4853 and NURS 4852.
Prereq.: Senior standing in nursing.

Learning Outcomes

BACCALAUREATE NURSING STUDENT LEARNING OUTCOMES
The integration of nursing theory, clinical practice, and critical thinking serves as the foundation for the program and upon completion of the program, the graduate is able to:

- Use the American Nurses Association Standards of Care when providing care for individuals, families, groups, and communities across the life span.
- Use critical thinking in decision-making and problem-solving while adhering to the Professional Code of Ethics for Nurses.
- Use effective and appropriate interpersonal communications and information technology.
- Apply theories and research findings from nursing and other disciplines to provide evidence-based, clinically, competent care.
- Provide culturally sensitive care and health education to individuals, families, groups, and communities.
- Demonstrate leadership and apply management skills that promote accountability, legal and ethical conduct, and maintenance of standards of care.
- Collaborate with the interdisciplinary healthcare team in planning, coordinating, and evaluating outcomes for quality cost-effective care and continuous improvement of the healthcare system.
- Manage human and material resources to provide access to healthcare for individuals, families, groups, and communities.
- Advocate for public policy to provide and protect the health of the public.
- Demonstrate commitment to life-long learning and service to the nursing profession.

Bachelor of Science in Nursing for Entry-Level Students

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall Semester Hours</th>
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<td></td>
<td>YSU 1500 Success Seminar 1</td>
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<td>PSYC 1560 General Psychology (SS) 3</td>
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<td>STAT 2625 or STAT 2601 Statistical Literacy and Critical Reasoning 4</td>
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<td>CHEM 1510 Chemistry for the Allied Health Sciences 4</td>
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<td>BIOL 1552 and Anatomy and Physiology 2 Laboratory 4</td>
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<td>ENGL 1551 Writing 2 3</td>
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<td>PSYC 3758 Lifespan Development 3</td>
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<td>SOC 1500 Introduction to Sociology 3</td>
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<tr>
<th>Year</th>
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<td>NURS 2610 Contemporary Nursing 3</td>
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<td>NURS 2643 Health Assessment 4</td>
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<td>NURS 2646 Pathophysiology 4</td>
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<td>CMST 1545 Communication Foundations 3</td>
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<td>FNUT 1551 Normal Nutrition 3</td>
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<td>NURS 2645 Professional Nursing 1 8</td>
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<td>NURS 2650 Pharmacology 3</td>
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<tr>
<th>Year</th>
<th>Year 3 Semester Hours</th>
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</table>

Youngstown State University Undergraduate 411
Bachelor of Science in Nursing for RN Students (100% Online RN-BSN Completion)

The curriculum assumes that an entering student to the RN-BSN completion program has an active unencumbered RN license.

### Bachelor of Science in Nursing for RN Students (100% Online RN-BSN Completion)

<table>
<thead>
<tr>
<th>COURSE</th>
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<td>Arts &amp; Humanities GER (AH)</td>
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<td>Professional Nursing 3 and Professional Nursing 3 Laboratory</td>
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<td>Nursing Research</td>
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<td>Child Bearing, Family, and Women's Health Nursing Laboratory (spring or fall semester)</td>
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<td>NURS 4832</td>
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<td>OR</td>
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<tr>
<td>NURS 4832 &amp; 4832L</td>
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<td>Nursing Care of Children and Families and Nursing Care of Children and Families Laboratory</td>
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<td>NURS 4842 &amp; 4842L</td>
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<td>Mental Health Nursing and Mental Health Nursing Laboratory</td>
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<td>OR</td>
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<td>Nursing Transitions and Nursing Transitions Laboratory</td>
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<td>Total Semester Hours</td>
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</table>

**Note:** All Basic Skills & Knowledge Domains requirements are included in the above curriculum.

Once admitted into the program sophomore year, any deviation from the prescribed curriculum must be approved by the Admission, Progression, and Graduation (APG) Committee.

The following Block Credit will be granted and posted on the student’s transcript after admission to the RN-BSN completion program:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>S.H.</th>
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<tbody>
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<td>BIOL 1551</td>
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<td>BIOL 1552</td>
<td>Anatomy and Physiology 2</td>
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<td>BIOL 1560</td>
<td>Microbiology for the Health Professions</td>
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<td>BIOL 1560L</td>
<td>Microbiology Laboratory for Online Programs</td>
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<td>Writing 1</td>
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<td>PSYC 1560</td>
<td>General Psychology</td>
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<tr>
<td>FNUT 1551</td>
<td>Normal Nutrition</td>
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This is credit earned in student’s RN program; credit will be given for some or all of the following courses:

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<td>NURS 3731</td>
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<td>NURS 3743</td>
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<tr>
<td>NURS 3743L</td>
<td>Professional Nursing 3 Laboratory</td>
<td></td>
</tr>
<tr>
<td>NURS 4832</td>
<td>Nursing Care of Children and Families</td>
<td>1</td>
</tr>
<tr>
<td>NURS 4832L</td>
<td>Nursing Care of Children and Families Laboratory</td>
<td></td>
</tr>
<tr>
<td>NURS 4840</td>
<td>Complex Care</td>
<td>1</td>
</tr>
<tr>
<td>NURS 4840L</td>
<td>Complex Care Laboratory</td>
<td></td>
</tr>
<tr>
<td>NURS 4842</td>
<td>Mental Health Nursing</td>
<td>1</td>
</tr>
<tr>
<td>NURS 4842L</td>
<td>Mental Health Nursing Laboratory</td>
<td></td>
</tr>
<tr>
<td>NURS 37XX</td>
<td>Prior learning experiential credit earned for active unencumbered RN</td>
<td>10</td>
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</tbody>
</table>

Total Potential Credits 78

Required Courses for the Bachelor of Science in Nursing for RN Students (47 s.h.)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 1551</td>
<td>Writing 2</td>
<td>3</td>
</tr>
<tr>
<td>CMST 1545</td>
<td>Communication Foundations (may be taken concurrently with nursing courses)</td>
<td>3</td>
</tr>
<tr>
<td>STAT 2625</td>
<td>Statistical Literacy and Critical Reasoning (may be taken concurrently with nursing courses but must be taken prior to NURS 3750)</td>
<td>4</td>
</tr>
<tr>
<td>or STAT 2601</td>
<td>Introductory Statistics</td>
<td>4</td>
</tr>
<tr>
<td>PSYC 3758</td>
<td>Lifespan Development (credit for PSYC 3758 will be given if PSYC 3755, 3756 or 3757 has previously been taken)</td>
<td>3</td>
</tr>
</tbody>
</table>

Any approved Arts and Humanities Course                                                                 | 3    |

Required Support Course                                                                                       | 3-4  |

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1520</td>
<td>Allied Health Chemistry for Online Programs</td>
<td>3</td>
</tr>
<tr>
<td>or CHEM 1505 &amp; 1505L</td>
<td>Allied Health Chemistry 1 and Allied Health Chemistry 1 Laboratory</td>
<td>3</td>
</tr>
</tbody>
</table>
License in School Nurse Licensure Program

Program Description
The School Nurse Licensure program is designed to build on an undergraduate education and to prepare registered nurses with a baccalaureate degree for school nurse licensure. Courses are taught by faculty in the Department of Nursing and in the Beeghly College of Education.

Curriculum
This program requires 15-17 semester credit hours including four courses plus 300 practicum hours (5 s.h. credit) in a school setting under the supervision of a licensed school nurse preceptor and a university faculty member. This practicum may be taken in increments to accommodate the working student. Opportunities for practicum hours to be waived (up to 200 hours) are considered on an individual basis for nurses with school nurse experience. Courses are either online or hybrid, meeting about four (4) times during the semester. After the completion of the courses, the student will receive a post-baccalaureate certificate.

Admission Process
Students seeking admission into the school nurse licensure program must have an undergraduate degree (BSN) with coursework in growth and development, psychology, sociology, and community health.

Students must be licensed to practice nursing in Ohio or eligible to be licensed (graduate of an approved school of nursing).

An Ohio Registered Nurse license is required for practicum placement. For more information and specific course descriptions, see the School Nurse Licensure Program Description (http://catalog.ysu.edu/undergraduate/colleges-programs/college-health-human-services/department-nursing/school-nurse-licensure-program/School_Nurse_Licensure_Program__7_.2016.pdf) or contact Dr. Valerie O'Dell at vmodell@ysu.edu.

Department of Social Work

(330) 941-1598
3365 Cushwa Hall

The baccalaureate degree with a major in social work prepares students for entry into beginning, generalist, and entry-level professional social work practice. Social workers are employed in a variety of settings such as public and private welfare agencies, mental health centers, health care settings, educational systems, correctional institutions, and business and industry.

The Bachelor of Social Work program is available on the main (Youngstown) campus. This program is also available in partnership with Lorain County Community College in Elyria, Ohio, and Lakeland County Community College in Kirtland, Ohio. For more specific information pertaining to the BSW program at the partnership sites, visit BSW and MSW Partnership Programs (http://www.ysu.edu/academics/bitonte-college-health-and-human-services/bsw-msw-partnership-programs/).

The BSW program at all sites is accredited by the Council on Social Work Education.

Course work at the host community college and combine credits earned with YSU social work courses taught on the site of the respective community college fulfill requirements for the BSW degree. All YSU instruction is provided by YSU faculty members. Students have access to Ohio LINK online research services, YSU student support, and additional academic support available through the community college.

Core Competencies of Social Work Practice
The BSW program at Youngstown State University applies a competency-based curriculum that develops in students core competencies of generalist social work practice as defined by the Council on Social Work Education. Upon graduating from the BSW program students are expected to:

1. Demonstrate ethical and professional behavior
2. Engage diversity and difference in practice
3. Advance human rights and social, economic and environmental justice.
4. Engage in research-informed practice and practice-informed research.
5. Engage in policy practice
6. Engage with individuals, families, groups, organizations and communities.
7. Assess individuals, families, groups, organizations and communities.
8. Intervene with individuals, families, groups, organizations and communities.
9. Evaluate practice with individuals, families, groups, organizations and communities

Admission Policy
Neither admission to the University nor enrollment in social work courses as a pre-social work major guarantees full admission to the social work program. Full admission to the program is required to become a social work major and to gain access to upper-division social work classes. Pre-social work majors who are not formally admitted to the social work program will be unable to obtain a permit to register for SCWK 3736 Social Work Methods with Individuals and subsequent social work courses for which SCWK 3736 Social Work Methods with Individuals is a prerequisite.

Qualified students who have been convicted of misdemeanor or felony offenses may be admitted to the program. However, field internship opportunities may be restricted due to agency prohibitions pertaining to the engagement of students in agency work in possession of criminal records. Additionally, students should be aware that state licensure in social work may not be possible for individuals with past convictions. Students with...
convictions are advised to become informed of requirements pertaining to social work licensure and possible avenues of appeal as they consider their enrollment in the Bachelor of Social Work program and the limitations prior convictions may impose on their ability to practice the profession of social work.

For more information, visit the Department of Social Work.

Chair
Dana Davis, Ph.D., Associate Professor, Chair

Professor
Mari L. Alschuler, Ph.D., Associate Professor
Audra Martin, Ph.D., Assistant Professor
Meenakshi Venkataraman, Ph.D., Assistant Professor
Sherri Harper Woods, D.M., Assistant Professor

Lecturer
Meghan Bileci, M.S.W., Lecturer
Tami W. Holcomb-Hathy, M.S.S.A., Senior Lecturer
Karla A. Wyant, M.S., Senior Lecturer

Majors
- Pre-Social Work (p. 418)
- Social Work (p. 415)

Minors
- Minor in Social Work (p. 418)

SCWK 1510 Introduction to Social Work 3 s.h.
An overview of the values, systems, policy, theories and concepts central to the profession of social work. This course will also review roles, licensure requirements and history of the social work profession. This is the first course orienting students to the social work profession.
Prereq.: SOC 1500.

SCWK 2600 Health Issues for Social Work Practice 3 s.h.
Explores impact of physical and biological forces on client issues/needs and importance of understanding these factors for professional social work practice. Emphasis given to biological development across the human lifespan, ecological issues, genetic influences, health concerns.
Prereq.: ENGL 1550 and SCWK 1510.

SCWK 2622 Social Work Processes 3 s.h.
Addresses the full range of communication skills in systems of all sizes for professional social work practice. Includes principles of effective communication, functions and purposes of communication, and the roles of social workers. Thirty clock hours of volunteer engagement required. Three hours lecture.
Prereq.: SCWK 1510.

SCWK 2641 American Social Welfare 3 s.h.
Overview of the history and evolution of social welfare programs and services in America. Emphasis on the identification and interrelationships of social values and structures, political factors, and economic conditions on resource allocation, including meeting the needs of special populations.

SCWK 2642 Human Behavior and the Social Environment for Social Workers 1 3 s.h.
A general social systems approach as a conceptual framework to the understanding of culture and society, communities, organizations, groups, families, and individuals as they develop over the lifespan. Application of theory and research to social work.
Prereq.: SCWK 1510, PSYC 1560.

SCWK 2644 Human Behavior and the Social Environment for Social Workers 2 3 s.h.
An ecosystems perspective in understanding families, groups, organizations and communities. Focus on individuals and their transactions with each other and their environment. Application of theory and research to social work.

SCWK 3720 Cultural Diversity 3 s.h.
This course emphasizes understanding the experiences, values, beliefs, and inherent problems of racial, ethnic, and other vulnerable population groups. The course focuses on groups affected by socioeconomic disparities, gender, sexual orientation and expression, religion, physical and cognitive challenges, and age. Students will be asked to apply theories, use differential assessments, and develop and use intervention skills necessary for effective social work practice with a diverse population.
Prereq.: Admission to the social work program.

SCWK 3726 Child Welfare and Case Planning 3 s.h.
This course provides the knowledge, concepts, and skills needed for beginning level social work practice in public and child welfare settings. Major focus is on protecting at-risk children by strengthening, supporting and empowering families.
Prereq.: SCWK 1510.

SCWK 3727 Child Welfare Permanency Planning 3 s.h.
Provides the knowledge, concepts, and skills needed for beginning level social work practice in public child welfare settings. Major focus is on the developmental needs and permanency planning associated with at-risk children served by the child welfare system.
Prereq.: SCWK 1510.

SCWK 3728 Social Services for Children 3 s.h.
Social welfare agencies and services developed by communities for the care and training of children. Development of a conceptual framework for understanding the issues, problems, and policies in children's services.
Prereq.: SCWK 2622.

SCWK 3730 Social Services and the Aged 3 s.h.
An empirical and analytical base for understanding the policies, problems, and trends in services for the aged.
Prereq.: SCWK 2622.

SCWK 3731 Social Services and the Disabled 3 s.h.
Problems arising from or related to illness and disability; adjustment of disabled persons. General intensive techniques for working with the disabled; recent research and treatment innovations.
Prereq.: SCWK 2622.

SCWK 3736 Social Work Methods with Individuals 3 s.h.
Overview of generalist practice methods with client systems of varying sizes. In-depth analysis of problem solving strategies and skills in working with individuals. Theory and research relating to practice. Social work purposes, functions, and values are addressed from the systems perspective.
Prereq.: Admission to SCWK Program.

SCWK 3737 Social Work Methods with Groups 3 s.h.
In-depth analysis of problem-solving strategies and skills in working with small groups. Theory and research relating to practice. Social work purpose, functions, and values are addressed from the systems perspective.
Prereq.: SCWK 3736.

SCWK 3738 Social Work Methods with Families 3 s.h.
In-depth analysis of problem-solving strategies and skills in working with families. Theory and research relating to practice. Social work purposes, functions, and values are addressed from the systems perspective.
Prereq.: SCWK 3736.
SCWK 3739  Social Work Methods with Communities and Organizations  3 s.h.
This course presents an in-depth analysis of problem-solving strategies and skills in working with organizations and communities. Theory and research relating to practice will be examined. Social Work purpose, functions, and values are addressed from the systems perspective. Prereq.: SCWK 3736.

SCWK 3740  Mental Health and Addictions  3 s.h.
This course focuses on the study of mental health and addictions in the Social Work discipline. The course includes social work theory, practice and service delivery methods, and research. Policy considerations will also be addressed. Prereq.: Junior standing or permission of instructor.

SCWK 3760  Research Methods for Social Workers  3 s.h.
Quantitative and Qualitative research methodologies for building knowledge for social work practice. Systematic evaluation of outcomes, theoretical bases, relevant technological advances, and ethical standards. Prereq.: Admission into the social work program.

SCWK 3770  Social Policy  3 s.h.
Review of the programs, structures and functions of social services including historical development and social, political and economic issues. Application of scientific method to analyze and develop social work policies designed to achieve social work goals and purpose. Prereq.: SCWK 2641 and POL 1560.

SCWK 4820  Special Topics Elective in Social Work  1-6 s.h.
An examination of various social work topics and issues of both current and long standing interest. 1 -.
Prereq.: BSW Student or permission of the BSW coordinator.

SCWK 4821  BSW Independent Study  1-6 s.h.
This course involves study under the personal supervision of a faculty member with the approval of the BSW Coordinator. The course demands that student and faculty member choose a topic related to the Social Work field. For successful completion students will tie the topic to at least three different CSWE. 1 -.
Prereq.: BSW Student.

SCWK 4825  Field Work in Social Services  6 s.h.
Professionally supervised practice in an approved social agency. The student must complete 225 hours per semester in an agency for each 6 s.h. of credit. Must be taken two consecutive semesters for a total of 12 s.h. CR/NC grade option only.
Prereq.: Admission to Social Work Internship.

SCWK 4826  Integrated Field Work Seminar  3 s.h.
Integration and evaluation of conceptual, affective, and experiential learning achieved from previous social work courses and field-based assignments. Prereq.: Completion of courses required to enter field work. Concurrent: SCWK 4825 first enrollment.

SCWK 4827  Integrated Capstone Seminar  3 s.h.
Provides opportunities to synthesize and integrate all the previous coursework from social work education. Includes both theoretical and experiential assignments to assist students with increased self awareness and to prepare them for the transition from college to entry-level generalist practice. Prereq.: Completion of courses required to enter field work and SCWK 4826. Concurrent: SCWK 4825 second enrollment. Gen Ed: Capstone.

SCWK 4860  Seminar Special Topics in Social Work  1-3 s.h.
Study of selected topics in social work theory, methods and research. May be repeated with different topics. 1-3 s.h. Prereq.: Junior standing or permission of instructor.

Bachelor of Social Work in Social Work

Youngstown State University offers an accredited Bachelor of Social Work program. The program includes general education, support, social work lecture courses and a social work field internship to prepare graduates for entry-level professional social work practice. Graduates of the BSW program are eligible for a license to practice social work as a Licensed Social Worker (LSW) in Ohio.

WELCOME

The social work profession has a long-standing tradition of delivering the energy, intelligence, and heart to make a difference in the lives of people. Through the efforts and energy of social workers, people who might otherwise suffer or go without suffer less and have what they need. Because of the knowledge and skills social workers use to help people, complex human problems are addressed responsibly using the best methods available. And through the expression of humane values held by members of the social work profession, people served are treated with compassion and dignity.

Social workers are committed to helping people adapt with a keen eye on the environment and the opportunities that exist to make this adaptation possible. Social workers work with a broad range of people and the concerns they bring and are interested in the actions that will improve their situations. Social workers are employed in a broad range of organizations both private and governmental.

If you are ready for a human services career that is challenging and offers a wide range of rewards, the Bachelor of Social Work degree is the place to start.

I invite you to explore the social work major at Youngstown State University.

DEPARTMENT CONTACT INFORMATION

- BSW Program Coordinator: Meenaskshi Venkataraman, PhD, Assistant Professor X2056 mvenkataraman@ysu.edu
- Social Work Department Chairman: Dr. Dana Davis: (330) 941-3774 ddavis05@ysu.edu
- Social Work Department Office: (330) 941-1598

BSW Program Mission

The Bachelor of Social Work Program at Youngstown State University has as its primary mission the educational preparation of students for beginning, competent, generalist social work practice.

The Bachelor of Social Work Program at Youngstown State University prepares graduates to assume professional roles in addressing social problems that are related to the economic and social conditions of the Youngstown region. Conditions of poverty, unemployment, underemployment, racial and ethnic disparities and demands for service exist in the region. Racial and ethnic minorities, women and children are particularly vulnerable groups who are over represented with regard to disparate social and economic conditions. The Department of Social Work is committed to raising the consciousness of students with regard to these conditions as well as increasing their understanding of how vulnerable groups are often the target of the aforementioned injustices. Exposing students to these problems increases understanding and enhances the potential for thoughtful solutions and remedies.

The Bachelor of Social Work Program at Youngstown State University offers education preparation that enables students to integrate the knowledge, values, and skills of the social work profession into competent practice with individuals, families, groups, institutions, organizations, and communities.

This preparation also enables students to apply their understanding of the social work profession in a broad range of client service settings with a variety of groups and presenting problems. As entry level practitioners, graduates are capable of delivering social services in a manner that is consistent with the values and ethics of the social work profession. Ultimately, students recognize their responsibility to continue their professional growth and development to include the incorporation of the latest technologies in their practice.

The mission, purpose, and philosophy of the Bachelor of Social Work Program at Youngstown State University are consistent with the overall institutional
mission. The institutional mission is “dedicated to encouraging public service . . . promoting and understanding diversity . . . and advancing the intellectual, cultural and economic life of the state and region.” The Bachelor of Social Work Program embraces the institution's commitment to address the needs of the region it which it is located.

BSW Program Goals
1. Prepare students for beginning, generalist social work practice.
2. Provide students with the ability to integrate the knowledge, values and skills of the social work profession into competent practice with individuals, families, groups, organizations and communities.
3. Develop the ability of students to work with a diversity of clients, presenting problems, and social service delivery systems.
4. Facilitate the development of core values and ethics of the social work profession.
5. Prepare students to understand and to address issues pertaining to social and economic justice to include poverty, oppression, racism and discrimination.
6. Prepare students to sustain their effectiveness by instilling the value of continuing professional growth and development.

ADMISSION AND PROGRESSION
Pre-Social Work

Students enter the BSW program by declaring themselves as pre-social work majors and begin progress toward a degree by enrolling in General Education Requirement, support, and pre-social work courses. These courses are typically completed in the freshman and sophomore years. Pre-social work courses include the following:

- Intro to the BCHHS (HAHS 1500)
- College Writing 1 & 2 (ENGL 1550 & 1550)
- Introduction to Sociology (SOC 1500)
- General Psychology (PSYC 1560)
- Communications Foundation (CMST 1545)
- Critical Thinking (PHIL 1565)
- World Religions (REL 2601)
- American Government (POL 1560)
- Professional Ethics (PHIL 2625)
- Introduction to Social Work (SCWK 1510)
- Health Issues for Social Workers (SCWK 2600)
- Social Work Processes (SCWK 2622)
- American Social Welfare History (SCWK 2641)
- Human Behavior and the Social Environment 1 & 2 (SCWK 2642 & 2644)

Students also select GER math, science, and general education courses as they complete pre-social work requirements.

Neither admission to the University nor enrollment in social work courses as a pre-social work major guarantees full admission to the social work major. Full admission to the major is required to enroll in upper-division social work classes. Pre-social work majors who are not formally admitted to the social work program will be unable to obtain a permit to register for Social Work 3736 and subsequent social work courses for which Social Work 3736 is a prerequisite. To be admitted to the program as a social work major, pre-social work majors must meet the following requirements:

Social Work Major
To gain entry into upper-division social work courses beginning with SCWK 3736 Social Work Methods with Individuals, students must be formally admitted to the social work major. To be admitted to the social work major, students must be declared pre-social work majors and meet the following requirements:

1. Complete all pre-social work courses with a C or better.
2. Possess an overall GPA of 2.5 or better.
3. Submit a completed Social Work Program Admission Application (available online or from the Department of Social Work) before the fourth week of the semester preceding the semester for which admission is sought.
4. Participate in an admission interview and be approved for admission by the BSW Program Admissions Committee.

ADVISORS
Brian Wells (330) 941-3323 bpwells@ysu.edu
Dr. Dana Davis (330) 941-3774 ddavis05@ysu.edu

ACCREDITATION
The Bachelor of Social Work program at Youngstown State University is fully accredited by the Council on Social Work Education (http://www.cswe.org/). The program was originally accredited in 1990, has remained accredited to-date, and is due for re-accreditation in 2021. Graduates of the BSW program are eligible for social work licensing in the State of Ohio. In 2016 YSU had seventy-seven percent of students take the exam and passed on their first attempt.

Program Locations
The Bachelor of Social Work program is available on the main (Youngstown) campus. This program is also available in partnership with Lakeland Community College in Kirtland, Ohio and Lorain County Community College in Elyria, Ohio. For more specific information pertaining to the BSW program at the partnership sites contact the following program coordinators:

- Lakeland CC: Ms. Tami Holcomb twholcomb@ysu.edu
- Lorain CCC: Ms. Karla Wyant kawyant@ysu.edu

The Bachelor of Social Work program at all sites is accredited by the Council on Social Work Education.

<table>
<thead>
<tr>
<th>COURSE</th>
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<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIRST YEAR REQUIREMENT - STUDENT SUCCESS</td>
<td></td>
<td></td>
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<tr>
<td>YSU 1500</td>
<td>Success Seminar</td>
<td>1-2</td>
</tr>
<tr>
<td>or SS 1500</td>
<td>Strong Start Success Seminar</td>
<td></td>
</tr>
<tr>
<td>or HONR 1500</td>
<td>Intro to Honors</td>
<td></td>
</tr>
<tr>
<td>General Education Requirements</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 1550</td>
<td>Writing 1 (Completed in advance of entering the social work major)</td>
<td>3-4</td>
</tr>
<tr>
<td>or ENGL 1549</td>
<td>Writing 1 with Support</td>
<td></td>
</tr>
<tr>
<td>ENGL 1551</td>
<td>Writing 2 (Completed in advance of entering the social work major)</td>
<td>3</td>
</tr>
<tr>
<td>CMST 1545</td>
<td>Communication Foundations (Completed in advance of entering the social work major)</td>
<td>3</td>
</tr>
<tr>
<td>MATH 2623</td>
<td>Quantitative Reasoning</td>
<td>3</td>
</tr>
</tbody>
</table>

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1. Complete all pre-social work courses with a C or better.
2. Possess an overall GPA of 2.5 or better.
3. Submit a completed Social Work Program Admission Application (available online or from the Department of Social Work) before the fourth week of the semester preceding the semester for which admission is sought.
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The Bachelor of Social Work program at all sites is accredited by the Council on Social Work Education.

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<tr>
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<tr>
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</tr>
<tr>
<td>or HONR 1500</td>
<td>Intro to Honors</td>
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<tr>
<td>General Education Requirements</td>
<td></td>
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</tr>
<tr>
<td>ENGL 1550</td>
<td>Writing 1 (Completed in advance of entering the social work major)</td>
<td>3-4</td>
</tr>
<tr>
<td>or ENGL 1549</td>
<td>Writing 1 with Support</td>
<td></td>
</tr>
<tr>
<td>ENGL 1551</td>
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<td>3</td>
</tr>
<tr>
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<td>Communication Foundations (Completed in advance of entering the social work major)</td>
<td>3</td>
</tr>
<tr>
<td>MATH 2623</td>
<td>Quantitative Reasoning</td>
<td>3</td>
</tr>
<tr>
<td>Arts and Humanities (6 s.h.)</td>
<td>Electives to meet 120 hours</td>
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</tr>
<tr>
<td>-----------------------------</td>
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<tr>
<td>PHIL 1565 Critical Thinking (required for the major)</td>
<td>16</td>
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<tr>
<td>PHIL 2625 Introduction to Professional Ethics (required for the major)</td>
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<td></td>
</tr>
<tr>
<td>Natural Science (2 courses; one with lab) (6-7 s.h.)</td>
<td>7</td>
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</table>

<table>
<thead>
<tr>
<th>Social Science (6 s.h.)</th>
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<tbody>
<tr>
<td>SOC 1500 Introduction to Sociology (required for the major)</td>
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</tr>
<tr>
<td>PSYC 1560 General Psychology (required for major)</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Social and Personal Awareness (6 s.h.)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>REL 2601 Introduction to World Religions (required for major)</td>
<td></td>
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</table>

One additional course 3

**Pre-Social Work Requirements**

The following courses are also completed in advance of entering the social work major.

<table>
<thead>
<tr>
<th>Course</th>
<th>Year 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOC 1500 Introduction to Sociology</td>
<td>Fall</td>
</tr>
<tr>
<td>PSYC 1560 General Psychology</td>
<td>Fall</td>
</tr>
<tr>
<td>PHIL 1565 Critical Thinking</td>
<td>Fall</td>
</tr>
<tr>
<td>POL 1560 American Government</td>
<td>Fall</td>
</tr>
<tr>
<td>REL 2601 Introduction to World Religions</td>
<td>Fall</td>
</tr>
<tr>
<td>SCWK 2610 Introduction to Social Work</td>
<td>Fall</td>
</tr>
<tr>
<td>SCWK 2600 Health Issues for Social Work Practice</td>
<td>Spring</td>
</tr>
<tr>
<td>SCWK 2622 Social Work Processes</td>
<td>Spring</td>
</tr>
<tr>
<td>SCWK 2641 American Social Welfare</td>
<td>Spring</td>
</tr>
<tr>
<td>SCWK 2642 Human Behavior and the Social Environment for Social Workers 1</td>
<td>Spring</td>
</tr>
<tr>
<td>SCWK 2644 Human Behavior and the Social Environment for Social Workers 2</td>
<td>Spring</td>
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</table>

**Social Work Major Requirements**

The following courses are completed in advance of the field internship SCWK 4825.

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCWK 2644</td>
<td>3</td>
</tr>
<tr>
<td>SCWK 3760</td>
<td>3</td>
</tr>
<tr>
<td>SCWK 3770</td>
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**Select one of the following:** 3

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
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<tbody>
<tr>
<td>SCWK 3726 Child Welfare and Case Planning</td>
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<tr>
<td>SCWK 3727 Child Welfare Permanency Planning</td>
<td></td>
</tr>
<tr>
<td>SCWK 3728 Social Services for Children</td>
<td></td>
</tr>
<tr>
<td>SCWK 3730 Social Services and the Aged</td>
<td></td>
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<tr>
<td>SCWK 3731 Social Services and the Disabled</td>
<td></td>
</tr>
<tr>
<td>SCWK 4860 Seminar Special Topics in Social Work</td>
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</table>

The following courses may be taken concurrently with the field work in social services SCWK 4825:

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCWK 4825 Field Work in Social Services (SCWK 4825 is taken 2 consecutive semesters at 6 semester hours each.)</td>
<td>12</td>
</tr>
<tr>
<td>SCWK 3737 Social Work Methods with Groups</td>
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<tr>
<td>SCWK 3738 Social Work Methods with Families</td>
<td>3</td>
</tr>
<tr>
<td>SCWK 3740 Mental Health and Addictions (Mental Health and Addictions)</td>
<td>3</td>
</tr>
<tr>
<td>SCWK 3739 Social Work Methods with Communities and Organizations</td>
<td>3</td>
</tr>
<tr>
<td>SCWK 3720 Cultural Diversity</td>
<td>3</td>
</tr>
<tr>
<td>SCWK 4826 Integrated Field Work Seminar (Must be taken concurrently with SCWK 4825 Field Work in Social Services. See course descriptions for pre-requisites.)</td>
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</tr>
<tr>
<td>SCWK 4827 Integrated Capstone Seminar (Must be taken concurrently with SCWK 4825 Field Work in Social Services. See course descriptions for pre-requisites.)</td>
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**Electives** 16

<table>
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**Total Semester Hours** 120-122

**Year 1**

<table>
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<tr>
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<tbody>
<tr>
<td>YSU 1500 Success Seminar</td>
<td>1</td>
</tr>
<tr>
<td>ENGL 1550 Writing 1</td>
<td>3-4</td>
</tr>
<tr>
<td>or ENGL 1549 or Writing 1 with Support</td>
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</tr>
<tr>
<td>SOC 1500 Introduction to Sociology</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 1560 General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>POL 1560 American Government</td>
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<tr>
<th>Course</th>
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**Year 2**

<table>
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</thead>
<tbody>
<tr>
<td>SCWK 2622 Social Work Processes</td>
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</tr>
<tr>
<td>SCWK 2641 American Social Welfare</td>
<td>3</td>
</tr>
<tr>
<td>SCWK 2642 Human Behavior and the Social Environment for Social Workers 1</td>
<td>3</td>
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<tr>
<td>SCWK 2625 Introduction to Professional Ethics</td>
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<table>
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</thead>
<tbody>
<tr>
<td>Electives</td>
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**Year 3**

<table>
<thead>
<tr>
<th>Course</th>
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</thead>
<tbody>
<tr>
<td>SCWK 2644 Human Behavior and the Social Environment for Social Workers 2</td>
<td>3</td>
</tr>
<tr>
<td>SCWK 2600 Health Issues for Social Work Practice</td>
<td>3</td>
</tr>
<tr>
<td>Natural Science</td>
<td>3</td>
</tr>
<tr>
<td>MATH 2623 Quantitative Reasoning</td>
<td>3</td>
</tr>
<tr>
<td>or STAT 2625 or Statistical Literacy and Critical Reasoning</td>
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<tr>
<td>Social &amp; Personal Awareness</td>
<td>3</td>
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<table>
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<tr>
<th>Course</th>
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**Year 4**

<table>
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<tr>
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</thead>
<tbody>
<tr>
<td>SCWK 3760 Research Methods for Social Workers</td>
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<tr>
<td>SCWK 3770 Social Policy</td>
<td>3</td>
</tr>
<tr>
<td>SCWK 3740 Mental Health and Addictions (Mental Health and Addictions)</td>
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<table>
<thead>
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<th>Course</th>
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<tbody>
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<td>Electives</td>
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**Spring**

<table>
<thead>
<tr>
<th>Course</th>
<th>Elective</th>
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</thead>
<tbody>
<tr>
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<tr>
<td>SCWK 3728 Social Services for Children</td>
<td>3</td>
</tr>
<tr>
<td>or SCWK 3726 or Child Welfare and Case Planning</td>
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<tr>
<td>or SCWK 3727 or Child Welfare Permanency Planning</td>
<td></td>
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<tr>
<td>or SCWK 3730 or Social Services and the Aged</td>
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<tr>
<td>or SCWK 3731 or Social Services and the Disabled</td>
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</tr>
<tr>
<td>or SCWK 4860 or Seminar Special Topics in Social Work</td>
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</tr>
<tr>
<td>SCWK 3737 Social Work Methods with Groups</td>
<td>3</td>
</tr>
<tr>
<td>SCWK 3738 Social Work Methods with Families</td>
<td>3</td>
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</table>

**Total Semester Hours** 120-122

**Year 1**

<table>
<thead>
<tr>
<th>Course</th>
<th>Fall</th>
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<tbody>
<tr>
<td>YSU 1500 Success Seminar</td>
<td>1</td>
</tr>
<tr>
<td>ENGL 1550 Writing 1</td>
<td>3-4</td>
</tr>
<tr>
<td>or ENGL 1549 or Writing 1 with Support</td>
<td></td>
</tr>
<tr>
<td>SOC 1500 Introduction to Sociology</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 1560 General Psychology</td>
<td>3</td>
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<td>POL 1560 American Government</td>
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<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
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</thead>
<tbody>
<tr>
<td>Electives</td>
<td>13-14</td>
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**Year 2**

<table>
<thead>
<tr>
<th>Course</th>
<th>Fall</th>
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</thead>
<tbody>
<tr>
<td>SCWK 2622 Social Work Processes</td>
<td>3</td>
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<tr>
<td>SCWK 2641 American Social Welfare</td>
<td>3</td>
</tr>
<tr>
<td>SCWK 2642 Human Behavior and the Social Environment for Social Workers 1</td>
<td>3</td>
</tr>
<tr>
<td>SCWK 2625 Introduction to Professional Ethics</td>
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<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
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</thead>
<tbody>
<tr>
<td>Electives</td>
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**Year 3**

<table>
<thead>
<tr>
<th>Course</th>
<th>Spring</th>
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</thead>
<tbody>
<tr>
<td>SCWK 2644 Human Behavior and the Social Environment for Social Workers 2</td>
<td>3</td>
</tr>
<tr>
<td>SCWK 2600 Health Issues for Social Work Practice</td>
<td>3</td>
</tr>
<tr>
<td>Natural Science</td>
<td>3</td>
</tr>
<tr>
<td>MATH 2623 Quantitative Reasoning</td>
<td>3</td>
</tr>
<tr>
<td>or STAT 2625 or Statistical Literacy and Critical Reasoning</td>
<td></td>
</tr>
<tr>
<td>Social &amp; Personal Awareness</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electives</td>
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**Year 4**

<table>
<thead>
<tr>
<th>Course</th>
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</thead>
<tbody>
<tr>
<td>SCWK 3760 Research Methods for Social Workers</td>
<td>3</td>
</tr>
<tr>
<td>SCWK 3728 Social Services for Children</td>
<td>3</td>
</tr>
<tr>
<td>or SCWK 3726 or Child Welfare and Case Planning</td>
<td></td>
</tr>
<tr>
<td>or SCWK 3727 or Child Welfare Permanency Planning</td>
<td></td>
</tr>
<tr>
<td>or SCWK 3730 or Social Services and the Aged</td>
<td></td>
</tr>
<tr>
<td>or SCWK 3731 or Social Services and the Disabled</td>
<td></td>
</tr>
<tr>
<td>or SCWK 4860 or Seminar Special Topics in Social Work</td>
<td></td>
</tr>
<tr>
<td>SCWK 3737 Social Work Methods with Groups</td>
<td>3</td>
</tr>
<tr>
<td>SCWK 3738 Social Work Methods with Families</td>
<td>3</td>
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</table>

**Total Semester Hours** 120-122
Request a Graduation Evaluation after completing 80-85 s.h. from the BCHHS Advising /Dean’s Office, 2104 Cushwa Hall, (330) 941-3321.

Semester Hours 15

Year 4
Fall
SCWK 4825 Field Work in Social Services 6
SCWK 4826 Integrated Field Work Seminar 3
Elective 3
SCWK 3738 Social Work Methods with Families 3
Semester Hours 15

Spring
SCWK 4825 Field Work in Social Services 6
SCWK 4827 Integrated Capstone Seminar 3
SCWK 3739 Social Work Methods with Communities and Organizations 3
SCWK 3720 Cultural Diversity 3
Semester Hours 15

Total Semester Hours 119-120

Learning Outcomes
The BSW program at Youngstown State University applies a competency-based curriculum that develops in students core competencies of generalist social work practice as defined by the Council on Social Work Education. Upon graduating from the BSW program, students are expected to:

1. Demonstrate ethical and professional behavior.
2. Engage diversity and difference in practice.
3. Advance human rights and social, economic, and environmental justice.
4. Engage in practice-informed research and research-informed practice.
5. Engage in policy practice.
6. Engage with individuals, families, groups, organizations, and communities.
7. Assess individuals, families, groups, organizations, and communities.
8. Intervene with individuals, families, groups, organizations, and communities.
9. Evaluate (practice with) individuals, families, groups, organizations, and communities.

Minor in Social Work

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
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<tbody>
<tr>
<td>Required Courses</td>
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<tr>
<td>SCWK 1510</td>
<td>Introduction to Social Work</td>
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<td>SCWK 2622</td>
<td>Social Work Processes</td>
<td>3</td>
</tr>
<tr>
<td>SCWK 2641</td>
<td>American Social Welfare</td>
<td>3</td>
</tr>
<tr>
<td>SCWK 2642</td>
<td>Human Behavior and the Social Environment for Social Workers 1</td>
<td>3</td>
</tr>
<tr>
<td>SCWK 3720</td>
<td>Cultural Diversity</td>
<td>3</td>
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<tr>
<td>Select one of the following:</td>
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</tr>
<tr>
<td>SCWK 2600</td>
<td>Health Issues for Social Work Practice</td>
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<tr>
<td>SCWK 2626</td>
<td>Child Welfare and Case Planning</td>
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<tr>
<td>SCWK 2627</td>
<td>Child Welfare Permanency Planning</td>
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<td>SCWK 2628</td>
<td>Social Services for Children</td>
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<td>SCWK 3730</td>
<td>Social Services and the Aged</td>
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</tr>
<tr>
<td>SCWK 3731</td>
<td>Social Services and the Disabled</td>
<td></td>
</tr>
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</table>

Pre-Social Work

Students enter the BSW program by declaring themselves as pre-social work majors and begin progress toward a degree by enrolling in General Education requirements, support, and pre-social work courses. These courses are typically completed in the freshman and sophomore years. Neither admission to the University nor enrollment in social work courses as a pre-social work major guarantees full admission to the social work program.

Pre-Social Work courses include the following:

<table>
<thead>
<tr>
<th>COURSE</th>
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<tbody>
<tr>
<td>HAHS 1500</td>
<td>Strong Start FYE</td>
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<tr>
<td>ENGL 1550</td>
<td>Writing 1</td>
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<tr>
<td>ENGL 1551</td>
<td>Writing 2</td>
<td>3</td>
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<tr>
<td>SOC 1500</td>
<td>Introduction to Sociology</td>
<td>3</td>
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<tr>
<td>CMST 1545</td>
<td>Communication Foundations</td>
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<td>PSYC 1560</td>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>SCWK 1510</td>
<td>Introduction to Social Work</td>
<td>3</td>
</tr>
<tr>
<td>POL 1560</td>
<td>American Government</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 1565</td>
<td>Critical Thinking</td>
<td>3</td>
</tr>
<tr>
<td>SCWK 2600</td>
<td>Health Issues for Social Work Practice</td>
<td>3</td>
</tr>
<tr>
<td>REL 2601</td>
<td>Introduction to World Religions</td>
<td>3</td>
</tr>
<tr>
<td>SCWK 2622</td>
<td>Social Work Processes</td>
<td>3</td>
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<tr>
<td>PHIL 2625</td>
<td>Introduction to Professional Ethics</td>
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<td>SCWK 2641</td>
<td>American Social Welfare</td>
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<tr>
<td>SCWK 2642</td>
<td>Human Behavior and the Social Environment for Social Workers 1</td>
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<tr>
<td>SCWK 2644</td>
<td>Human Behavior and the Social Environment for Social Workers 2</td>
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</table>

Total Semester Hours 47

Students also select General Education math, natural science, social and personal awareness courses as well as electives as they complete pre-social work requirements the freshman and sophomore years of the program.

<table>
<thead>
<tr>
<th>COURSE</th>
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<tbody>
<tr>
<td>MATH 2623</td>
<td>Quantitative Reasoning</td>
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<td>Natural Science With Lab</td>
<td>4</td>
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<td>3</td>
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<td>Social &amp; Personal Awareness</td>
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<tr>
<td>Electives</td>
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</table>

Total Semester Hours 26

Minor in Aerospace Studies (Air Force ROTC)

The Air Force ROTC program, offered through an agreement with Kent State University, provides professional preparation and leadership training for students considering service as officers in the U.S. Air Force. The program also offers information on Air Force career opportunities and the role of the military in the American society. Scholarships are available to help students complete their bachelor’s and/or master’s degrees.

Overview

There are two primary AFROTC programs under which officer candidates may earn their commissions.
The first is a four-year AFROTC program. It includes membership in (and completion of) the General Military Course (GMC), a four-week field training course, and the Professional Officer Course (POC).

The second is a two-year program designed for students who have two years of academic work remaining. In the two-year program, students are selected to participate in the POC program and attend a five-week field training course, which includes coursework covered during the freshman and sophomore years.

Both programs result in a commission as a Second Lieutenant in the United States Air Force. A minor in aerospace studies is available in consultation with the academic major advisor and the Aerospace Studies Department.

Registering
Courses are normally taken for YSU academic credit as part of the students' electives. Entering freshmen and sophomores should register for aerospace studies courses at the same time, and in the same manner, as they enroll in their other YSU courses. Juniors and seniors wishing to enroll in AFROTC should call the AFROTC Unit Admissions Officer prior to enrollment to discuss the particular requirements. Students enrolled in the program must travel to Kent State University once a week to attend the courses. Arrangements can be made for carpooling or picking up if the students do not have transportation.

The General Military Course
The General Military Course (GMC) is offered in four-sequenced lower-division aerospace studies courses. Each course consists of one hour of academic instruction per week and 15 leadership laboratory contact hours per semester. Non-scholarship membership in the GMC does not confer any military status or commitment upon the students, but affords them the opportunity to learn about the Air Force and its role in the American society. Students who do not want commissions may take the aerospace studies courses for academic credit only. There is no military obligation incurred by enrolling in the GMC.

The Professional Officer Course
The Professional Officer Course (POC) is a four-part upper division aerospace studies course. Each course consists of three hours of academic instruction per week and 15 leadership laboratory contact hours per semester. Entrance into POC is limited to qualified students desiring to compete for Air Force commissions. Enrollment in this program is based upon a cumulative grade point average, physical qualifications, and leadership.

Veterans
Veterans with previous honorable, active U.S. military service who wish to enroll in the POC may be eligible for a waiver of either the GMC or its equivalent as an entrance requirement.

Uniforms and Textbooks
AFROTC uniforms and textbooks are provided at no charge. Textbooks are returned upon completion of each academic year or upon withdrawal from the course. Uniforms are returned upon completion of the program or withdrawal from the course.

Financial Assistance
Students who demonstrate academic and leadership potential may be selected by the professor of aerospace studies to compete for scholarships. The scholarship award includes tuition, textbook allowance, some course fees, and a monthly tax-free stipend.

Scholarship Statement of Understanding
Air Force ROTC scholarship recipients must meet and maintain certain academic and military retention standards and serve in the active-duty Air Force after graduation.

Contact Information
For further information, contact:
Department of Aerospace Studies
AFROTC DET 630
104 Terrace Hall
Kent State University
Kent, Ohio 44242
(330) 672-2182
or e-mail us at: det630@kent.edu.

The curriculum in aerospace studies is divided into two parts:

- the General Military Course, usually taken during the freshman and sophomore years
- the Professional Officer Course, normally taken during the junior and senior years (see Overview, above)

Air Force officers are assigned as full-time faculty members and teach all aerospace studies courses. The courses include one hour of academic instruction and a 1½-hour leadership laboratory each week. All courses are taught at the Kent State University main campus in Kent, Ohio. Non-scholarship students incur no military obligation when enrolled in freshman- and sophomore-level courses.

Year 1

<table>
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<th>Course Code</th>
<th>Course Title</th>
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<td>AERO 1503</td>
<td>Leadership Laboratory</td>
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<td>Semester Hours</td>
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<tr>
<td>Spring</td>
<td>AERO 1502</td>
<td>Heritage and Values</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>AERO 1504</td>
<td>Leadership Laboratory</td>
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<td></td>
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<td>Semester Hours</td>
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Year 2

<table>
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<th>Course Title</th>
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<tbody>
<tr>
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Year 3

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Year 4

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The College of Science, Technology, Engineering, and Mathematics

Wim Steelant, Ph.D., Dean
Moser Hall 2200
(330) 941-3009

The College of Science, Technology, Engineering, and Mathematics (STEM) is the academic unit of the university comprising the following departments:

- Chemical and Biological Sciences
  - Forensic Science
- Rayen School of Engineering
  - Civil/Environmental and Chemical Engineering
  - Electrical and Computer Engineering
  - Mechanical, Industrial, and Manufacturing Engineering
- School of Computer Science, Information, and Engineering Technology
- Mathematics and Statistics
- Physics, Astronomy, Geology, and Environmental Sciences

Formed in 2007 through an administrative reorganization, the STEM College is committed to strengthening core areas of its departments as well as facilitating collaborations between its faculties and students at all levels in its disciplines. Its formation is a bold initiative in coupling higher education to economic development by enhancing research activities and collaboration with industry.

College of STEM Mission

The College of STEM is committed to furthering the mission of Youngstown State University by delivering integrated programs of excellence to an engaged learning community. The College uses state-of-the-art technology in teaching and research to meet the educational objectives of students, both undergraduate and graduate, enrolled in all its programs. The College fosters intellectual growth through integration of teaching, scholarship, and service that expands the talents of its constituencies—students, faculty, business, industry, and government—with synergistic activities in and beyond the classroom; prepares our graduates for a multidisciplinary world through a flexible and diverse curriculum; and meets the need for a well-educated, skilled workforce for economic growth with industrial partnerships, research, and scholarship.

Core Values

The College of STEM fully subscribes to the core values of the University: the centrality of students; excellence and innovation; integrity/human dignity; and collegiality and public engagement.

- We are a learning-centered college committed to the intellectual, ethical, and career growth of all learners, both inside and outside the classroom.
- We foster intellectual inquiry, exploration, and discovery that transcends traditional boundaries and facilitates interdisciplinary scholarship. We expand and apply knowledge and encourage creativity through research and scholarship.
- We are committed to the social development of students, by promoting ethical behavior and collegiality in all endeavors, and to enrichment of the University through diversity of the faculty and student body.
- We enhance the quality of life and economic health of the region, the state, and beyond by providing students with the knowledge and skills to meet the challenges of modern society, and by providing business, industry, government, K–12 schools, and the public with technical expertise and leadership to support innovation and growth.

Degrees/Programs

The College offers four bachelor’s degrees:

- Bachelor of Arts (BA)
- Bachelor of Engineering (BE)
- Bachelor of Science (BS)
- Bachelor of Science in Applied Science (BSAS)

The College offers two associate degrees:

- Associate of Applied Science (AAS)
- Associate of Technical Studies (ATS)

Also, in conjunction with FirstEnergy Corporation, the power plant technology option is available. Please visit our website (http://www.ysu.edu/powersystems/) for more information regarding the lineman and power plant technology programs.

A certificate program is offered in construction management technology.

Students whose needs are not met by existing conventional programs may wish to investigate and apply for the Individualized Curriculum Program (see Academic Policies and Procedures).

Admissions

Students who are calculus-ready will be directly admitted into the academic department in their major. Those who are not will remain under the guidance of the professional advising staff until they are department-ready. For more details on the preparation and criteria of the STEM standards, please check with the Advising Center in the College of STEM.

Degree Requirements

Requirements for completion of a baccalaureate degree and an associate degree within the College of STEM include all University requirements detailed in the Academic Policies and Procedures section of the Undergraduate Catalog (i.e., graduation and general education requirements, course levels requirements including majors and minors, where applicable), grade point average, residency, and degree applications). Specific requirements for each major in the College of STEM are listed by department or school. Consult the Rayen School of Engineering and Engineering Technology section in the Undergraduate Catalog for additional graduation requirements for the BE degree.

Minors

Minors are not required for every program/major in the STEM College. Consult the curricula listed in the department sections of the catalog for specific requirements for each major. For programs/majors requiring minors, at least eighteen (18) semester hours are required for the minor, and one-third of the hours must be upper-division.

Foreign Language Requirement for the Bachelor’s Degree

All candidates for the BA degrees and the BS degree in math in the College are required to complete the elementary (1550: Elementary Foreign Language) and the intermediate level (2600: Intermediate Foreign Language) of the same foreign language. Students with a foreign language background may desire to take the foreign language placement test in order to place into the intermediate level (2600) or satisfy the requirement. It may be possible to satisfy the foreign language requirement through appropriate college transfer coursework and credit by exam.
Candidates for the BS entering after fall 2012 (except Math majors), candidates for the BE degree, and candidates for the BSAS degree do not have a foreign language requirement.

For more information, visit the College of Science, Technology, Engineering, and Mathematics (STEM) (http://www.ysu.edu/academics/science-technology-engineering-mathematics/).

Department of Chemical and Biological Sciences (and Forensic Science)

Welcome

The former departments of Chemistry and Biological Sciences, along with the Forensic Science program from the former Department of Criminal Justice and Forensic Sciences, have all merged together to form the new Department of Chemical and Biological Sciences. Our new department is comprised of nearly 50 full- and part-time faculty members and technical and administrative staff.

The department offers several degree programs, including BA, BS, and MS programs in Biological Sciences and Chemistry, and a BSAS program in Forensic Science. To learn more about these programs and various tracks available within them (e.g., pre-medicine), visit the links below:

- Biological Sciences (p. 421)
- Chemical Sciences (p. 431)
- Forensic Science (p. 441)

Biological Sciences

(330) 941-3601
Room 4037 Ward Beecher Science Hall

Courses in Biological Sciences may be applied toward a Bachelor of Science or a Bachelor of Arts degree. The department offers specialized courses in three major divisions:

- molecular biology and microbiology
- physiology and anatomy
- evolution, ecology and environmental biology

Biological Sciences offers courses to prepare a student for a wide variety of fields and future careers including:

- dentistry
- botany
- health-related careers
- physical therapy
- medicine
- veterinary medicine
- medical technology
- microbiology
- molecular biology
- biomedical research
- biotechnology

Advisement is available concerning course selection appropriate for a specific field in biology and in the choice of a minor or minors. These degrees may be earned in eight semesters if students average 16 hours per semester.

For more information, visit Biological Sciences (http://www.ysu.edu/academics/science-technology-engineering-mathematics/biology-major/).
BIOL 1551 Anatomy and Physiology 1  3 s.h.
Structure, function, and clinical applications of the integument, musculature, skeletal, and nervous systems. Targeted for students in nursing and associated health professions. Three hours of lecture. Not applicable to the Biology major.
Prereq.: High school biology, CHEM 1501 or equivalent, and MATH 1501 or equivalent.
Gen Ed: Natural Science.

BIOL 1560 Microbiology for the Health Professions  2 s.h.
Characteristics, epidemiology, and pathology of viruses, bacteria, and protozoa of medical significance. Other topics dealing with the control of microorganisms and food microbiology will be covered. Not applicable to a biology major. Two hours of lecture. Must be taken concurrent with BIOL 1560L or substitute.

BIOL 1561L Anatomy and Physiology 1 Laboratory  1 s.h.
Anatomical study of skeletal, muscular, and nervous systems. For students in nursing and associated health professions. Two hours of laboratory per week. Not applicable to the Biology major. BIOL 1551 must be taken either previous or concurrent.

BIOL 1562 Anatomy and Physiology 2  4 s.h.
Structure, function, and clinical applications of the endocrine, cardiovascular, respiratory, renal, digestive, and reproductive systems. Targeted for students in nursing and associated health professions. Three hours lecture, two hours lab. Not applicable to the Biology major.
Prereq.: BIOL 1551.
Gen Ed: Natural Science.

BIOL 1552L Anatomy and Physiology 2 Laboratory  0 s.h.
Anatomy and Physiology 2 Laboratory.

BIOL 1553 Anatomy and Physiology 3 Laboratory  0 s.h.
BIOL 2601 or BIOL 2603 and BIOL 3702 recommended.

BIOL 1554L Anatomy and Physiology 3 Laboratory  0 s.h.
BIOL 2601 or BIOL 2603 and BIOL 3702 recommended.

BIOL 1554 Anatomy and Physiology 3  4 s.h.
The chemical and physical foundations of life, structure and function of cells and organelles, metabolism, basic molecular biology and inheritance, and principles of evolution. Three hours of lecture, two hours of lab per week.
Prereq.: CHEM 1515 or concurrent enrollment in CHEM 1515.
Coreq.: BIOL 2601.
Gen Ed: Natural Science.

BIOL 1555L Anatomy and Physiology 4 Laboratory  0 s.h.
Not applicable to the Biology major. Three hours of laboratory per week. Must be taken concurrent with BIOL 1550.

BIOL 2601 General Biology: Molecules and Cells  4 s.h.
The chemical and physical foundations of life, structure and function of cells and organelles, metabolism, basic molecular biology and inheritance, and principles of evolution. Three hours of lecture, three hours of lab per week.
Prereq.: CHEM 1515 or concurrent enrollment in CHEM 1515.
Gen Ed: Natural Science.

BIOL 2601H Honors General Biology Molecules and Cells  4 s.h.
The chemical and physical foundations of life, structure and function of cells and organelles, metabolism, basic molecular biology and inheritance, and principles of evolution. Three hours of lecture, three hours of lab per week.
Prereq.: BIOL 2601.
Gen Ed: Natural Science.

BIOL 2601L General Biology: Molecules and Cells Laboratory  0 s.h.
General Biology: Molecules and Cells Laboratory.

BIOL 2602 General Biology: Organisms and Ecology  4 s.h.
The structure and function of plants and animals. Examination of the structure and functioning of organismic communities and ecosystems. Required of all biological sciences majors. Three hours of lecture, two hours of lab per week.
Prereq.: BIOL 2601 and CHEM 1515.
Gen Ed: Natural Science.

BIOL 2602H Honors General Biology Organisms and Ecology  4 s.h.
The structure and function of plants and animals. Examination of the structure and functioning of organismic communities and ecosystems. Required of all biological sciences majors. Three hours of lecture, three hours of lab per week.
Prereq.: BIOL 2601 and CHEM 1515.
Gen Ed: Natural Science.

BIOL 2602L General Biology: Organisms and Ecology Laboratory  0 s.h.
General Biology: Organisms and Ecology Laboratory.
BIOL 3725 Mammalogy 3 s.h.
Overview of structure, function, evolutionary history, behavior, ecology, and classification of mammals. Animal groups will be studied from diverse biological points of view. Three hours lecture.
Prereq.: BIOL 2601, BIOL 2602.

BIOL 3730 Human Physiology 4 s.h.
Concepts of human physiology that focus on the regulation of homeostatic mechanisms by the neural, endocrine, cardiovascular, respiratory, and renal systems. Four hours lecture.
Prereq.: BIOL 2602 or BIOL 2603.

BIOL 3730L Human Physiology Laboratory 1 s.h.
Experimental approach to the study of human physiology that explores regulation of homeostasis by the neural, endocrine, cardiovascular, respiratory, and renal systems. Three hours laboratory.
Prereq. or concurrent: BIOL 3730.

BIOL 3740 Plant Diversity 4 s.h.
Examination of the diversity of plant species and their interaction with the environment; the morphology, reproduction and ecology of a wide variety of vascular and nonvascular plants. Three hours lecture, two hours lab.
Prereq.: BIOL 2602.

BIOL 3740L Plant Diversity Laboratory 0 s.h.
Plant Diversity Laboratory.

BIOL 3741 Animal Diversity 4 s.h.
Examination of the diversity of animal species and their interaction with the environment; the morphology, reproduction and ecology of a wide variety of invertebrate and vertebrate phylum. Three hours lecture, two hours lab.
Prereq.: BIOL 2602.

BIOL 3741L Animal Diversity Laboratory 0 s.h.
Animal Diversity Laboratory.

BIOL 3745 Plant Physiology 3 s.h.
Examination of the physiology of higher plants with emphasis on the whole plant aspects as well as on biochemical, cellular and molecular aspects of how plants function including transport and translocation of water and solutes, photosynthesis and respiration, growth and development.
Prereq.: BIOL 2602.

BIOL 3759 Evolution 3 s.h.
Examination of fundamental evolutionary mechanisms integral to such covered topics as natural selection, drift, genetic variance maintenance, gene flow consequences, phylogenetic resolution, modes of speciation, coevolution, cooperation and mating system structure. Ecological concepts will be integrated throughout.
Prereq.: BIOL 2601 and BIOL 2602 or instructor consent.

BIOL 3762 Field Botany 4 s.h.
Identification, ecology, and significance of local plants. Two hours lecture, four hours lab.
Prereq.: BIOL 2602.

BIOL 3762L Field Botany Laboratory 0 s.h.
Field Botany Laboratory.

BIOL 3780 General Ecology 5 s.h.
Examination of ecological principles affecting species distributions, interactions and biodiversity; dynamics of populations, communities and ecosystems; life history evolution; origin, maintenance and loss of genetic variation; mechanisms of speciation and extinction; experimental design and analysis. Three hours lecture, four hours lab.
Prereq.: BIOL 2602.

BIOL 3780L General Ecology Laboratory 0 s.h.
General Ecology Laboratory.

BIOL 4800 Bioinformatics 4 s.h.
Fundamentals of the theories and applications of bioinformatics. Topics include the tools and databases used to analyze DNA and protein sequences and the evolutionary relationships between sequences from different organisms. Three hours of lecture, two hours of lab per week.
Prereq.: BIOL 3721 or BIOL 3759.

BIOL 4800L Bioinformatics Laboratory 0 s.h.
Bioinformatics Laboratory.

BIOL 4801 Environmental Microbiology 4 s.h.
The occurrence, detection, and control of microbes, including bacteria and viruses, in food, water, and the environment. Two hours lecture, four hours lab.
Prereq.: BIOL 3702.

BIOL 4801L Environmental Microbiology Laboratory 0 s.h.
Environmental Microbiology Laboratory.

BIOL 4802 Ecology of Lakes 3 s.h.
A study of the physical, chemical, biological, and ecological structure and function of lake ecosystems.
Prereq.: 20 s.h. of BIOL and/or GES, or permission of instructor.

BIOL 4803 Stream Ecology 3 s.h.
A study of the physical, chemical, biological, and ecological structure and function of stream ecosystems, and of their associated riparian zones.
Prereq.: 20 s.h. of BIOL and/or GES, or permission of instructor.

BIOL 4804 Aquatic Biology 3 s.h.
Ecological, physical, and chemical aspects of aquatic ecosystems. Study of the interaction between organisms and their environment.
Prereq.: BIOL 3780.

BIOL 4805 Ichthyology 3 s.h.
Ecology, evolution, and taxonomy of fishes, especially those of Midwestern United States. Two hours lecture, two hours lab.
Prereq.: BIOL 3741.

BIOL 4805L Ichthyology Laboratory 0 s.h.
Ichthyology Laboratory.

BIOL 4806 Ecosystem Field Ecology 4 s.h.
Students will learn about destination ecosystems, including associated organisms, interactions, physical, chemical, and climatic conditions, culture, and human impacts. Can be taken more than once for different destinations. Students must be in good health, hike, swim, and handle primitive conditions. This course involves travel expenses in addition to lab fees.
Prereq.: permission from instructor.
Coreq.: 3000-level course.

BIOL 4809 The Human Microbiome 3 s.h.
Covers microbial communities and their interactions associated with the human host. Scientific literature on the identity and roles of microbes associated with the human gut, oral cavity, skin, genital-urinary tract and respiratory system will be reviewed, presented, and discussed.
Prereq.: BIOL 3702.

BIOL 4811 Comparative Biomechanics 4 s.h.
Overview of biomechanical principles involved with the structure and function of animals. Topics include mechanical properties of biomaterials, comparative muscle architecture and physiology, and locomotor mechanisms of human walking and running. Three hours lecture, two hours lab.
Prereq.: BIOL 2602 or BIOL 3705, and PHYS 1501 or PHYS 2610.

BIOL 4811L Comparative Biomechanics Laboratory 0 s.h.
Comparative Biomechanics Laboratory.

BIOL 4822 Principles of Pharmacology 3 s.h.
Overview of drugs used for the diagnosis, prevention, and treatment of disease. Topics include mechanisms of action, therapeutic and adverse drug effects, and clinical uses for each drug category.
Prereq.: BIOL 3730.
BIOL 4823  Cancer Biology  2 s.h.
This course will present the student with the comprehensive body of knowledge concerning cancer biology. It will draw upon all areas of biological sciences; from environmental causal factors to the molecular mechanisms underlying tumor cell formation and development of malignant tumors. The scientific basis of therapies will be explored.
Prereq.: Junior standing.

BIOL 4829  Microbial Physiology  3 s.h.
This course synthesizes material covered in introductory microbiology and cell and molecular biology. Topics include biomolecule synthesis, molecular biology, bacterial genetics, gene expression, energy production, photosynthesis, bacteriophages and microbial stress responses.
Prereq.: BIOL 3702 or BIOL 3711.

BIOL 4834  Advanced Physiology: Integrative Mechanisms  3 s.h.
Examination of advanced human physiology through a detailed study of selected body systems. Systems examined may include the cardiovascular, respiratory, and renal systems, exchange dynamics among body fluid compartments, and acid-base balance. Three hours lecture.
Prereq.: BIOL 3730.

BIOL 4834L  Advanced Physiology: Integrative Mechanisms Laboratory  1 s.h.
Experimental approach to the examination of advanced human physiology through a detailed study of selected body systems. Systems examined may include the cardiovascular, renal and respiratory systems, exchange dynamics among body fluid compartments, and acid-base balance. Three hours lab.
Prereq. or concurrent BIOL 4834.

BIOL 4835  Advanced Physiology: Regulatory Mechanisms  3 s.h.
Examination of advanced human physiology through a detailed study of selected body systems. Systems examined may include musculoskeletal, gastrointestinal, metabolic and thermoregulatory. Three hours lecture.
Prereq.: BIOL 3730.

BIOL 4835L  Advanced Physiology: Regulatory Mechanisms Laboratory  1 s.h.
Experimental approach to the examination of advanced human physiology through a detailed study of selected body systems. Systems examined may include the musculoskeletal, gastrointestinal, metabolic and thermoregulatory. Three hours lab.
Prereq. or concurrent BIOL 4835.

BIOL 4837  Cell Biology: Protein Biology Laboratory  1 s.h.
The relationship of nucleic acid structure and protein structure will be studied in hands on series of laboratory experiments. Concepts presented will integrate the use of modern molecular biology techniques with contemporary approaches to current problems in biology. Three hours of laboratory.
Prereq.: BIOL 3711 or consent of instructor.

BIOL 4839  Selected Topics in Physiology  1 s.h.
Advanced study of topics in physiology not covered in depth in other physiology courses. May be repeated twice up to 2 s.h.
Prereq.: BIOL 3730.

BIOL 4848  Biology of Fungi  3 s.h.
Examination of fungal and fungal-like organisms with emphasis placed upon their taxonomy, phylogenetic relationships, structure, function, physiology, genetics, and ecology. Exploration of their role in agriculture, medicine, and scientific research.
Prereq.: BIOL 2602 or graduate standing.

BIOL 4849  Medical Mycology  3 s.h.
Survey of infectious diseases caused by fungi including their etiology, epidemiology, histopathology, diagnosis, and treatment. Host-parasite interactions and the environmental and molecular factors that contribute to establishment of fungal disease in humans and animals.
Prereq.: BIOL 2602.

BIOL 4850  Problems in Biology  1-3 s.h.
Special biological problems for which materials and equipment are available and for which the student is qualified.
Prereq.: Senior standing or consent of the chairperson.

BIOL 4861  Senior Biology Capstone Experience  2 s.h.
A capstone experience for the major in Biological Sciences (B.A. or B.S. degree).
Prereq.: Senior status in Biological Sciences, completion of at least one 3700 and 4800 level laboratory course.

BIOL 4866  Forest Ecology  4 s.h.
A study of the structure, function, and management/conservation of forest ecosystems, including the biology and taxonomy of woody plants. Major emphasis on eastern North America.
Prereq.: 20 s.h. BIOL or GES, or combination thereof, or PI.
Coreq.: BIOL 4866L.

BIOL 4866L  Forest Ecology Laboratory  0 s.h.
Forest Ecology Laboratory.
Prereq.: 20 semester hours BIOL or GES, or combination thereof, or PI.
Coreq.: BIOL 4866.

BIOL 4867  Stem Cell Biology  3 s.h.
This course deals with the study of stem cells and their role in biology. Developmental aspects of stem cells will be presented. The relevance of stem cells to medicine and applied biology will be discussed.
Prereq.: BIOL 3711 or BIOL 4890 or consent of instructor.

BIOL 4878  Conservation Biology  3 s.h.
A socioeconomic, political and ecological approach to issues associated with the maintenance and value of biodiversity and ecosystem services; consequences of anthropogenic climate change, fragmentation, overharvesting, extinction, and invasion of non-native species; biofuels; ecological restoration, nature reserve design and sustainability. Three hours lecture.
Prereq.: BIOL 3759 or BIOL 3780 or permission of instructor.

BIOL 4882  Mathematical Biology Research  1-3 s.h.
Introduction to research in mathematical biology through an interdisciplinary study of a topic in biology and mathematics. May be repeated once. Grading is Traditional/PR, Cross-listed: MATH 4882.
Prereq.: MATH 1571 or permission of instructor.

BIOL 4890  Molecular Genetics  3 s.h.
Examination of DNA structure, DNA replication, transcription, translation, RNA processing, and gene control in both prokaryotes and eukaryotes.
Prereq.: BIOL 3711 or BIOL 3721.

BIOL 4890L  Molecular Genetics Laboratory  1 s.h.
Introduction to basic molecular techniques such as transformation, use of restriction enzymes, agarose gel electrophoresis, and polymerase chain reaction (PCR). Three hours lab.
Prereq.: BIOL 4890 or concurrent.

BIOL 4893  Biology of Proteins  2 s.h.
This course engages the student in the world of proteins, from the basic structure and function of proteins in biological systems, to the applied sciences involved in the development of commercially valuable proteins. This course extends the students previous understanding and expertise in molecular biology to emphasize proteins.
Prereq.: BIOL 3711 or BIOL 4890 or consent of instructor.

BIOL 4896  Introduction to Biomedical Research  2 s.h.
The class will introduce students to processes and strategies at the core of modern biomedical research. Students will develop an understanding of experimental design, experimental implementation, data evaluation and communication.
Prereq.: BIOL 3730.

BIOL 4897  Internship in Biomedical Research  3 s.h.
This course designed for a student pursuing the Certificate in Biomedical Research. Students enrolled in this course will be assigned to a research project in collaboration with physicians from the Mercy Health system. This course will provide the student with a comprehensive clinical research experience.
Prereq.: Accepted into Certificate in Biomedical Research program; concurrent or previously taking BIOL 4896.
BIOL 4898 Research in Physiology 3 s.h.
A comprehensive laboratory experience under the supervision of a faculty mentor. Course may be repeated once for a total of 6 s.h.
Prereq.: BIOL 3730, CHEM 3720, and acceptance into the Certificate in Anatomy and Physiology program.

BIOL 4899 Internships in the Biological Sciences 2 s.h.
Internships integrate theory and practice through supervised learning experiences. Internships are available in any area of the biological/biomedical sciences, including field research and analytical, clinical, or research laboratories. Students submit a proposal of the internship, maintain a journal of experiences, and submit a final project paper.
Prereq.: Junior or senior standing in Biological Sciences and permission of the chairperson.

BIOL 5806 Field Ecology 4 s.h.
Field study involving quantitative methods for the collection, analysis, and interpretation of ecological data in populations and communities. Pre-field trip lectures, specified experiments, independent study, a written report, and an oral presentation of the independent study project. Required off-campus travel. Field conditions may be rigorous and/or primitive.
Prereq.: BIOL 3780.

BIOL 5811 Ornithology 4 s.h.
Structure, physiology, behavior, ecology, and evolution of birds. Natural history of common bird species and important bird groups, especially those in Ohio. Basic methods and skills for field study of birds. Three hours lecture, three hours lab.
Prereq.: BIOL 3741.

BIOL 5811L Ornithology Laboratory 0 s.h.
Ornithology Laboratory.

BIOL 5813 Vertebrate Histology 4 s.h.
The microscopic study of mammalian tissues and organs. Three hours lecture, two hours lab.
Prereq.: BIOL 3711 or BIOL 3730.

BIOL 5813L Vertebrate Histology Laboratory 0 s.h.
Vertebrate Histology Laboratory.

BIOL 5823 Advanced Eukaryotic Genetics 3 s.h.
Mechanisms and control of eukaryotic DNA replication, current advances in understanding the genetics basis of cancer and other genetic diseases, problems and benefits of the various eukaryotic genome projects (human and others), gene therapy and genetic engineering in animals and plants.
Prereq.: BIOL 3721 and BIOL 4890.

BIOL 5824 Behavioral Neuroscience 4 s.h.
Explores the biological basis of human experience and behavior. Topics include basic neuroanatomy and neuropharmacology, emotions, learning and memory, sleep and biological rhythms, reproductive behavior, and communication. Three hours lecture, three hours lab.
Prereq.: BIOL 3730.

BIOL 5824L Behavioral Neuroscience Laboratory 0 s.h.
Behavioral Neuroscience Laboratory.

BIOL 5827 Gene Manipulation 2 s.h.
Techniques of modern molecular biology including the use of restriction enzymes, plasmid and plasmid vectors, Southern blots and the polymerase chain reaction (PCR). Introduction and manipulation of foreign DNA in bacterial and eukaryotic systems. Six hours lab.
Prereq.: BIOL 4890.

BIOL 5832 Principles of Neurobiology 4 s.h.
Topics include cell and molecular biology of the neuron, properties of excitable membranes, functional neuroanatomy, integrated motor control, sensory signal transduction, developmental neurobiology, mechanisms of disease processes, and higher cortical function.
Prereq.: BIOL 3730.

BIOL 5833 Mammalian Endocrinology 3 s.h.
Detailed examination of the hormones of the hypothalamus, pituitary, thyroid, adrenal pancreas, gonads, and other organs with putative endocrine function. Focus on the physiological functions of hormones and their mechanisms of action with emphasis on the human.
Prereq.: BIOL 3730.

BIOL 5840 Advanced Microbiology 3 s.h.
Molecular mechanisms for virulence of pathogenic organisms.
Prereq.: BIOL 3702 or equivalent.

BIOL 5844 Physiology of Reproduction 3 s.h.
Current concepts of reproductive processes and their physiological control in mammalian systems.
Prereq.: BIOL 3730.

BIOL 5853 Biometry 3 s.h.
Application of fundamental theory and procedures to the statistical analysis of biological data.
Prereq.: 20 s.h. of Biological Sciences.

BIOL 5858 Computational Bioinformatics 3 s.h.
Project-based learning course with a focus on using a Linux environment and PERL for processing large genomic datasets and data mining. Relational database and BioPERL will also be introduced for genomic data analysis and display. Three hours of combined lecture and lab per week.

BIOL 5868 Gross Anatomy 1 4 s.h.
Regional study of the human body with emphasis on functional and topographic anatomy and clinical correlations. Two hours lecture-demonstration, four hours lab.
Prereq.: Admission to the YSU Physical Therapy program or permission of instructor.

BIOL 5868L Gross Anatomy 1 Laboratory 0 s.h.
Gross Anatomy 1 Laboratory.

BIOL 5869 Gross Anatomy 2 4 s.h.
Regional study of the human body with emphasis on functional and topographic anatomy and clinical correlations. Two hours lecture-demonstration, four hours lab.
Prereq.: BIOL 5868.

BIOL 5869L Gross Anatomy 2 Laboratory 0 s.h.
Gross Anatomy 2 Laboratory.

BIOL 5888 Environmental Biotechnology 4 s.h.
Lectures will cover the use of microbes for solving environmental problems. In the laboratory, teams of students will design and implement experiments in bioremediation. This course is intended for students in biology, environmental studies, chemistry, and engineering. Two hours lecture and four hours lab.
Prereq.: CHEM 3719 or CEEN 3736.

BIOL 5888L Environmental Biotechnology Laboratory 0 s.h.
Environmental Biotechnology Laboratory.

Bachelor of Arts in Biological Sciences

The Bachelor of Arts is recommended only for those students who plan careers in business or secondary education careers related to the Biological Sciences. A minimum of 32 S.H. in Biological Sciences is required for the BA degree.

All biological sciences majors must take the courses as listed for the BA degree in the curriculum sheet.

The BA degree in biological sciences requires a minimum of 32 semester hours from within the Department of Biological Sciences. (Courses at the 1000 level are not applicable to a Bachelor of Arts degree.)

All biological sciences majors must take the following courses for the BA degree:
## Bachelor of Arts in Biological Sciences

### General Education Requirements

#### Core Competencies

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<tbody>
<tr>
<td>ENGL 1550</td>
<td>Writing 1</td>
<td>3-4</td>
</tr>
<tr>
<td>or ENGL 1549</td>
<td>Writing 1 with Support</td>
<td></td>
</tr>
<tr>
<td>ENGL 1551</td>
<td>Writing 2</td>
<td>3</td>
</tr>
<tr>
<td>CMST 1545</td>
<td>Communication Foundations</td>
<td>3</td>
</tr>
</tbody>
</table>

Mathematics Requirement (met through MATH in major)

Knowledge Domains

<table>
<thead>
<tr>
<th>Domain</th>
<th>Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arts and Humanities (6 s.h.)</td>
<td></td>
</tr>
<tr>
<td>Natural Sciences (2 courses, 1 with lab) (6-7 s.h.)</td>
<td></td>
</tr>
<tr>
<td>Social Science (6 s.h.)</td>
<td></td>
</tr>
<tr>
<td>Social and Personal Awareness (6 s.h.)</td>
<td></td>
</tr>
<tr>
<td>STEM 1520</td>
<td>STEM First Year Orientation</td>
</tr>
</tbody>
</table>

### Foreign Language Requirement

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>FNLG 1550</td>
<td>Elementary Foreign Language</td>
</tr>
<tr>
<td>FNLG 2600</td>
<td>Intermediate Foreign Language</td>
</tr>
</tbody>
</table>

### Major Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 2601</td>
<td>General Biology: Molecules and Cells</td>
</tr>
<tr>
<td>BIOL 2602</td>
<td>General Biology: Organisms and Ecology</td>
</tr>
</tbody>
</table>

**Core Courses**

Select one course from the following groups:

**Group A**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 3702</td>
<td>Microbiology</td>
</tr>
<tr>
<td>BIOL 3702L</td>
<td>Microbiology Laboratory</td>
</tr>
<tr>
<td>BIOL 3711</td>
<td>Cell Biology: Fine Structure</td>
</tr>
</tbody>
</table>

**Group B**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 3725</td>
<td>Mammalogy</td>
</tr>
<tr>
<td>BIOL 3730</td>
<td>Human Physiology</td>
</tr>
</tbody>
</table>

**Group C**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 3740</td>
<td>Plant Diversity</td>
</tr>
<tr>
<td>BIOL 3741</td>
<td>Animal Diversity</td>
</tr>
</tbody>
</table>

Select 13-15 semester hours of courses in the Department of Biological Sciences at the 3000-5000 level. At least two of these courses must have a laboratory component.

**Capstone Course**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 4861</td>
<td>Senior Biology Capstone Experience</td>
</tr>
</tbody>
</table>

**Electives**

Select 32 s.h. of Biological Science credit.

### Additional Course Work

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1515</td>
<td>General Chemistry 1</td>
</tr>
<tr>
<td>&amp; 1515L</td>
<td>General Chemistry 1 Laboratory</td>
</tr>
<tr>
<td>CHEM 1516</td>
<td>General Chemistry 2</td>
</tr>
<tr>
<td>&amp; 1516L</td>
<td>General Chemistry 2 Laboratory</td>
</tr>
</tbody>
</table>

Select Elementary and Intermediate foreign language.

**Strongly recommended:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 3719 &amp; 3719L</td>
<td>Organic Chemistry 1 and Organic Chemistry 1 Laboratory</td>
</tr>
<tr>
<td>CHEM 3720 &amp; 3720L</td>
<td>Organic Chemistry 2 and Organic Chemistry 2 Laboratory</td>
</tr>
<tr>
<td>PHYS 1501 &amp; 1501L</td>
<td>Fundamentals of Physics 1 and Fundamentals of Physics Laboratory 1</td>
</tr>
<tr>
<td>PHYS 1502 &amp; 1502L</td>
<td>Fundamentals of Physics 2 and Fundamentals of Physics Laboratory 2</td>
</tr>
</tbody>
</table>

### Total Semester Hours

118-123

---

1 The general biology courses are prerequisites for genetics and all core and upper-division courses.

Students seeking admission to medically related professional schools should complete the BS program.

The mathematics, physics and chemistry courses may not be taken under the credit/no credit option. (For General University Requirements (p. 51), see the Academic Policies and Procedures section of the Undergraduate Catalog.)

**Recommended core curriculum meeting science requirements of medically related and other professional schools.**

### Year 1

#### Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 2601</td>
<td>General Biology: Molecules and Cells</td>
</tr>
<tr>
<td>CHEM 1515</td>
<td>General Chemistry 1</td>
</tr>
<tr>
<td>CHEM 1515R</td>
<td>Recitation for General Chemistry 1 (opt)</td>
</tr>
<tr>
<td>ENGL 1550</td>
<td>Writing 1 (electives may be substituted if excused based on results of Placement Test)</td>
</tr>
<tr>
<td>or ENGL 1549</td>
<td>Writing 1 with Support</td>
</tr>
<tr>
<td>GER AL/SS/SPA</td>
<td></td>
</tr>
</tbody>
</table>

Semester Hours: 15-16

#### Spring

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 2602</td>
<td>General Biology: Organisms and Ecology</td>
</tr>
<tr>
<td>CHEM 1516</td>
<td>General Chemistry 2</td>
</tr>
<tr>
<td>CHEM 1516R</td>
<td>Recitation for General Chemistry 2 (opt)</td>
</tr>
<tr>
<td>ENGL 1551</td>
<td>Writing 2 (electives may be substituted if excused based on results of Placement Test)</td>
</tr>
<tr>
<td>GER elective (COMM 1545 recommended)</td>
<td></td>
</tr>
</tbody>
</table>

Semester Hours: 15

### Year 2

#### Fall

**Biology Core Course**

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 3730</td>
<td>Human Physiology</td>
</tr>
<tr>
<td>BIOL 3711</td>
<td>Cell Biology: Fine Structure</td>
</tr>
<tr>
<td>BIOL 3740</td>
<td>Plant Diversity</td>
</tr>
<tr>
<td>MATH 1570</td>
<td>Applied Calculus 1</td>
</tr>
<tr>
<td>or MATH 1571</td>
<td>Calculus 1</td>
</tr>
<tr>
<td>GER Elective (AL)</td>
<td></td>
</tr>
</tbody>
</table>

Semester Hours: 16-18

#### Spring

**Biology Core Course**

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 3730</td>
<td>Human Physiology</td>
</tr>
<tr>
<td>BIOL 3711</td>
<td>Cell Biology: Fine Structure</td>
</tr>
<tr>
<td>BIOL 3740</td>
<td>Plant Diversity</td>
</tr>
<tr>
<td>MATH 1570</td>
<td>Applied Calculus 1</td>
</tr>
<tr>
<td>or MATH 1571</td>
<td>Calculus 1</td>
</tr>
<tr>
<td>GER Elective (SI)</td>
<td></td>
</tr>
</tbody>
</table>

Semester Hours: 16-18

### Year 3

#### Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 3700-5800 course w/l</td>
<td></td>
</tr>
<tr>
<td>Intermediate Foreign Language</td>
<td></td>
</tr>
<tr>
<td>GER electives (PS), (SI)</td>
<td></td>
</tr>
</tbody>
</table>

Semester Hours: 16-18

---
**Year 1**

<table>
<thead>
<tr>
<th>Semester</th>
<th>COURSE/TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>YSU 1500</td>
<td>Success Seminar</td>
</tr>
<tr>
<td></td>
<td>OR SS 1500</td>
<td>Strong Start Success Seminar</td>
</tr>
<tr>
<td></td>
<td>OR HONR 1500</td>
<td>Intro to Honors</td>
</tr>
<tr>
<td></td>
<td>ENGL 1550</td>
<td>Writing 1</td>
</tr>
<tr>
<td></td>
<td>OR ENGL 1549</td>
<td>Writing 1 with Support</td>
</tr>
<tr>
<td></td>
<td>ENGL 1551</td>
<td>Writing 2</td>
</tr>
<tr>
<td></td>
<td>CMST 1545</td>
<td>Communication Foundations</td>
</tr>
<tr>
<td></td>
<td>Mathematics Requirement (Met with MATH 1570 in the major)</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Arts and Humanities (6 s.h.)</td>
<td>6</td>
</tr>
</tbody>
</table>

**Bachelor of Science in Biological Sciences**

(330) 941-3601

Ward Beecher Science Hall

The Bachelor of Science degree is recommended for those who wish to pursue careers in the biological sciences, medicine, dentistry, or other related biotech fields. A minimum of 37 s.h. in Biological Sciences is required for the BS degree.

The BS degree in biological sciences requires a minimum of 37 semester hours from within the Department of Biological Sciences. (Courses at the 1000 level are not applicable to a Bachelor of Science degree.):

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 1550</td>
<td>Writing 1</td>
<td>3-4</td>
</tr>
<tr>
<td>OR ENGL 1549</td>
<td>Writing 1 with Support</td>
<td>3-4</td>
</tr>
<tr>
<td>ENGL 1551</td>
<td>Writing 2</td>
<td>3</td>
</tr>
<tr>
<td>CMST 1545</td>
<td>Communication Foundations</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics Requirement (Met with MATH 1570 in the major)</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Arts and Humanities (6 s.h.)</td>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>

**Year 4**

<table>
<thead>
<tr>
<th>Semester</th>
<th>COURSE/TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>BIOL 3700 course w/ lab</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>BIOL 3700 course</td>
<td>3-4</td>
</tr>
<tr>
<td></td>
<td>GER electives (AL), (PS)</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>General Elective</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Semester Hours</td>
<td>16-17</td>
</tr>
<tr>
<td>Spring</td>
<td>BIOL 3700 course</td>
<td>3-4</td>
</tr>
<tr>
<td></td>
<td>General Electives</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Semester Hours</td>
<td>12-13</td>
</tr>
</tbody>
</table>

**Learning Outcomes**

The department’s learning outcomes for the BA in biology are as follows:

- Students will be fluent in the terminology of the biological sciences.
- Students will be competitive for entry into the workplace.
- Students will be familiar with the scientific process and the process of hypothesis testing.
- Students should be able to reason critically, both individually and in collaboration with other students.

**Required Support Courses**

<table>
<thead>
<tr>
<th>Mathematics - take one of the following courses (4 s.h.)</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1570</td>
<td>Applied Calculus 1</td>
</tr>
<tr>
<td>MATH 1571</td>
<td>Calculus 1</td>
</tr>
<tr>
<td>Statistics - take one of the following courses (3-4 s.h.)</td>
<td>3-4</td>
</tr>
<tr>
<td>BIOL 5853</td>
<td>Biometry</td>
</tr>
<tr>
<td>STAT 3717</td>
<td>Statistical Methods</td>
</tr>
<tr>
<td>Physics - take one of the following sequences (9-10 s.h.)</td>
<td>9-10</td>
</tr>
<tr>
<td>PHYS 1501 &amp; 1501L</td>
<td>Fundamentals of Physics 1 and Fundamentals of Physics Laboratory 1</td>
</tr>
<tr>
<td>PHYS 1502 &amp; 1502L</td>
<td>Fundamentals of Physics 2 and Fundamentals of Physics Laboratory 2</td>
</tr>
<tr>
<td>OR PHYS 2610 &amp; 2610L</td>
<td>General Physics 1 and General Physics Laboratory 1</td>
</tr>
<tr>
<td>PHYS 2611 &amp; 2611L</td>
<td>General Physics 2 and General Physics Laboratory 2</td>
</tr>
<tr>
<td>Chemistry (16 s.h.)</td>
<td>16</td>
</tr>
<tr>
<td>CHEM 1515 &amp; 1515L</td>
<td>General Chemistry 1 and General Chemistry 1 Laboratory</td>
</tr>
<tr>
<td>CHEM 1516 &amp; 1516L</td>
<td>General Chemistry 2 and General Chemistry 2 Laboratory</td>
</tr>
<tr>
<td>CHEM 3719 &amp; 3719L</td>
<td>Organic Chemistry 1 and Organic Chemistry 1 Laboratory</td>
</tr>
<tr>
<td>CHEM 3720 &amp; 3720L</td>
<td>Organic Chemistry 2 and Organic Chemistry 2 Laboratory</td>
</tr>
</tbody>
</table>

**Enrollment in the recitation sections are recommended for PHYS 1501 and the above Chemistry courses. Recitation Chemistry courses may not count toward the Chemistry minor.**

**Required Biology Courses (37 s.h.)**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 2601 &amp; 2601L</td>
<td>General Biology: Molecules and Cells</td>
<td></td>
</tr>
<tr>
<td>BIOL 2602 &amp; 2602L</td>
<td>General Biology: Organisms and Ecology and General Biology: Organisms and Ecology Laboratory 1</td>
<td></td>
</tr>
<tr>
<td>BIOL 3721</td>
<td>Genetics or BIOL 3759</td>
<td>Evolution</td>
</tr>
<tr>
<td>BIOL 4861</td>
<td>Senior Biology Capstone Experience</td>
<td>2</td>
</tr>
<tr>
<td>Electives in Biology</td>
<td>24 s.h. of BIOL courses at the 3000-5000 level. At least two of these courses must have a laboratory component, with at least one at the 4800-5800 level.</td>
<td></td>
</tr>
</tbody>
</table>

**Total Semester Hours**

120-124
Bachelor of Science in Biological Sciences BaccMed Track

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 1550</td>
<td>Writing 1 (electives may be substituted if</td>
<td>3-4</td>
</tr>
<tr>
<td>or ENGL 1549</td>
<td>Writing 1 with Support based on results of Placement Test)</td>
<td></td>
</tr>
<tr>
<td>GER AL/SS/SPA</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Semester Hours 15-16**

**Spring**
- BIOL 2602 & 2602L: General Biology: Organisms and Ecology and General Biology: Organisms and Ecology Laboratory 4
- CHEM 1516: General Chemistry 2 4
- ENGL 1551: Writing 2 (selectives may be substituted if excused based on results of Placement Test) 3
- GER Elective (CMST 1545) 3

**Fall**
- General Elective 3
- Biology Elective 4
- MATH 1570 or MATH 1571: Applied Calculus 1 or Calculus 1 4
- BIOL 3721 or BIOL 3759: Genetics (CT) or Evolution 3
- CHEM 3719: Organic Chemistry 1 4

**Semester Hours 18**

**Year 2**

**Spring**
- Biology Elective 4
- STAT 3717 or BIOL 5853: Statistical Methods or Biometry 3-4
- CHEM 3720: Organic Chemistry 2 4
- GER elective (SI) 3

**Fall**
- BIOL 3700-5800 course 4
- PHYS 1501 & 1501L: Fundamentals of Physics 1 and Fundamentals of Physics Laboratory 1 5
- GER Elective (PS) 3
- GER Elective (SI) 3
- Elective 4

**Semester Hours 14-15**

**Spring**
- BIOL 3700-5800 course 4
- PHYS 1502 & 1502L: Fundamentals of Physics 2 and Fundamentals of Physics Laboratory 2 4
- GER Elective (AL) 3
- GER Elective (PS) 3
- General Elective 3

**Semester Hours 19**

**Year 3**

**Fall**
- BIOL 5800 course 4
- GER elective (AL) 3
- General Electives 6

**Semester Hours 17**

**Spring**
- BIOL 3700-5800 course 4
- BIOL 4861: Senior Biology Capstone Experience 2

**Semester Hours 13**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 1550</td>
<td>Writing 1</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 1551</td>
<td>Writing 2</td>
<td>3</td>
</tr>
<tr>
<td>CMST 1545</td>
<td>Communication Foundations</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1581H</td>
<td>Honors Biomathematics 2 (MATH 1571 is now an allowed prerequisite for MATH 1581H)</td>
<td>4</td>
</tr>
</tbody>
</table>

Some courses are categorized in more than one knowledge domain. Courses can only be used once within the General Education model. Listed GER courses below are required for this major:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 1550</td>
<td>Writing 1</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 1551</td>
<td>Writing 2</td>
<td>3</td>
</tr>
<tr>
<td>CMST 1545</td>
<td>Communication Foundations</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1581H</td>
<td>Honors Biomathematics 2 (MATH 1571 is now an allowed prerequisite for MATH 1581H)</td>
<td>4</td>
</tr>
</tbody>
</table>

All Biological Science majors following the BaccMed track must satisfy the following requirements:

**First Year Requirement - Student Success**
- YSU 1500: Success Seminar 1-2
- or SS 1500: Strong Start Success Seminar
- or HONR 1500: Intro to Honors

**General Education Requirements**
- Arts and Humanities 6

**Bachelor of Science in Biological Sciences BaccMed Track**

The BS in Biological Sciences - BaccMed Track degree is competitive program recommended for those who wish to pursue careers in medicine.

**Learning Outcomes**

The student learning outcomes for the major in biological sciences are as follows:

- Students will be prepared for entry into professional health or research related schools, post-graduate (MS, PhD) programs, or the work place.
- Students will master the subjects found on standardized tests (molecular biology, physiology, immunology) required for entrance into professional schools (MCAT, GRE, etc.).
- Students will demonstrate an understanding of fundamental biological principles and their application.
- Students should be able to reason critically, both individually and in collaboration with other students.

**Learning Outcomes**

The student learning outcomes for the major in Biological Sciences are as follows:

- Students will be prepared for entry into professional health or research related schools, post-graduate (MS) programs, or the workplace.
- Students will master the subjects found on standardized tests (molecular biology, physiology, immunology) required for entrance into professional schools (MCAT, GRE, etc.).
- Students will demonstrate an understanding of fundamental biological principles and their application.
- Students should be able to reason critically, both individually and in collaboration with other students.

The BS degree in Biological Sciences requires a minimum of 37 semester hours from within the Department of Biological Sciences. (Courses at the 1000-level are not applicable to a BS degree.) Required courses may not be taken as credit/no credit.

The BaccMed track is competitive program recommended for those who wish to pursue careers in medicine.
Minor in Biological Sciences

**Core Courses**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 2601</td>
<td>General Biology: Molecules and Cells</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 2601L</td>
<td>General Biology: Molecules and Cells Laboratory</td>
<td>0</td>
</tr>
<tr>
<td>BIOL 2602</td>
<td>General Biology: Organisms and Ecology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 2602L</td>
<td>General Biology: Organisms and Ecology Laboratory</td>
<td>0</td>
</tr>
</tbody>
</table>

**Required Support Courses (54 s.h.):**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1515 &amp; 1515L</td>
<td>General Chemistry 1 and General Chemistry 1 Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 1516 &amp; 1516L</td>
<td>General Chemistry 2 and General Chemistry 2 Laboratory</td>
<td>4</td>
</tr>
</tbody>
</table>

**Social Science**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOC 1500</td>
<td>Introduction to Sociology</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 1560</td>
<td>General Psychology</td>
<td>3</td>
</tr>
</tbody>
</table>

**Social and Personal Awareness**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHLT 1531</td>
<td>Fundamentals of Public Health</td>
<td>2</td>
</tr>
<tr>
<td>SOC 3745</td>
<td>Sociology of Health, Illness, and Healthcare</td>
<td>3</td>
</tr>
</tbody>
</table>

**Certificate in Biomedical Research**

The certificate in Biomedical Research is designed to better prepare undergraduate students interested in pursuing advanced degrees in biomedical research (e.g., MS and PhD programs) as well as professional degrees in medicine, dentistry, or physical therapy. This certificate will ensure that students not only focus their education toward disciplines related to biomedicine, but also gain comprehensive clinical research experience. This program will bring together Youngstown State University undergraduates with Mercy Health resident physicians to work on a collaborative, clinical research project.

**Admission Requirements:**

- Minimum grade point average of 3.4 (on a 4.0 scale) in the prerequisite courses
- Submission of the CBR application and two CBR recommendation forms
- Interview with the CBR Program Coordinator

**Program Requirements:**

- Must complete 26-29 semester hours, including all required courses and 9-12 hours of electives.
- Must maintain a grade point average of 3.0 or better in the required and elective courses.

**CBR Prerequisite Courses**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 2601 &amp; 2601L</td>
<td>General Biology: Molecules and Cells and General Biology: Molecules and Cells Laboratory</td>
<td>4</td>
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<tr>
<td>BIOL 3730</td>
<td>Human Physiology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 3730L</td>
<td>Human Physiology Laboratory</td>
<td>1</td>
</tr>
</tbody>
</table>

**CBR Required Courses**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 3705 &amp; 3705L</td>
<td>Introduction to Human Gross Anatomy and Introduction to Human Gross Anatomy Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 4896</td>
<td>Introduction to Biomedical Research</td>
<td>2</td>
</tr>
<tr>
<td>BIOL 5853</td>
<td>Biometry 2</td>
<td>4</td>
</tr>
<tr>
<td>or STAT 3717</td>
<td>Statistical Methods</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 4839</td>
<td>Selected Topics in Physiology</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 4897</td>
<td>(must be taken twice 3+3 s.h.)</td>
<td>6</td>
</tr>
</tbody>
</table>

**Select 9-12 s.h. of CBR Elective Courses from the following:**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 3703</td>
<td>Clinical Immunology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 3725</td>
<td>Mammalogy</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 4809</td>
<td>The Human Microbiome</td>
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</tr>
<tr>
<td>BIOL 4822</td>
<td>Principles of Pharmacology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 4823</td>
<td>Cancer Biology</td>
<td>2</td>
</tr>
</tbody>
</table>

**Free Electives**

Additional coursework as needed to reach 120 s.h.

**Total Semester Hours**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
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<tbody>
<tr>
<td>120-121</td>
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**Free Electives**

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<td></td>
</tr>
</tbody>
</table>
must also complete the required prerequisites to the upper-division courses, and cannot take a course on a credit/no credit basis.

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<tr>
<th>COURSE</th>
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</tr>
</thead>
<tbody>
<tr>
<td>BIOL 5813</td>
<td>Vertebrate Histology and Vertebrate Histology Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 4898</td>
<td>Research in Physiology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 4834 &amp; 4834L</td>
<td>Advanced Physiology: Integrative Mechanisms Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 5853 &amp; STAT 3771</td>
<td>Comparative Vertebrate Anatomy and Comparative Vertebrate Anatomy Laboratory</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 4822</td>
<td>Principles of Pharmacology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 4830</td>
<td>Functional Neuroanatomy</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 4830 &amp; 4830L</td>
<td>Functional Neuroanatomy Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 5832</td>
<td>Principles of Neurobiology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 5833</td>
<td>Mammalian Endocrinology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 4835 &amp; 4835L</td>
<td>Advanced Physiology: Regulatory Mechanisms and Advanced Physiology: Regulatory Mechanisms Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 4836 &amp; 4836L</td>
<td>Cell Biology: Molecular Mechanisms and Cell Biology: Molecular Mechanisms Laboratory</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 5844</td>
<td>Physiology of Reproduction</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 5868 &amp; 5868L</td>
<td>Gross Anatomy 1 and Gross Anatomy 1 Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 5869 &amp; 5869L</td>
<td>Gross Anatomy 2 and Gross Anatomy 2 Laboratory</td>
<td>4</td>
</tr>
</tbody>
</table>

1. Students must enroll for BIOL 4897 Internship in Biomedical Research for two consecutive semesters.
2. Students may take BIOL 5853 and STAT 3771. In this case, BIOL 5853 will serve as an elective course in fulfillment of the CBR.

Learning Outcomes

- Demonstrate both a theoretical and practical application of natural sciences to clinical medicine.
- Demonstrate mastery of the scientific method and technical skills specific to conducting biomedical research investigations.
- Demonstrate mastery of locating, critically evaluating and utilizing biomedical primary literature.
- Demonstrate mastery of oral and written scientific communication.

Certificate in Anatomy and Physiology

The certificate in Anatomy and Physiology is an option within the Bachelor of Science degree in Biological Sciences. The program is designed for undergraduate and post-baccalaureate students interested in pursuing careers in: advanced degrees in anatomy and physiology, professional degrees in medicine, dentistry or veterinary medicine, or employment in industry.

The Department of Biological Sciences will grant admission to the Certificate in Anatomy and Physiology program. Due to the research-intensive aspects of this program, a limited number of competitive candidates will be selected for participation in the certificate. Minimum requirements for admission are:

- Students must have a minimum grade point average of 2.7 (on a 4.0 scale) in the prerequisite courses.
- Submission of two academic letters of recommendation.
- Interview with the members of the division of Anatomy and Physiology.

To receive the Certificate in Anatomy and Physiology, students must complete 26-29 semester hours and maintain a grade point average of 3.0 or better in their required and elective courses in the certificate program. A total of 17 semester hours will be from required courses, including advanced courses in anatomy and physiology, and that have both a lecture and laboratory component. The remaining 9-12 semester hours will be selected by each student from a list of elective courses, which allows a student to tailor a portion of their course work to individual interest within the areas of anatomy and physiology. Student
informed of the issues facing society in regards to molecular biology than their peers.

This program is aimed to be an interface between fundamental basics sciences and applied sciences. The degree will require almost no additional resources from the University. The Department of Biological Sciences and the STEM college already have the faculty, research base, and courses to implement this program. The Bachelors degree in Molecular Biology and Biotechnology will simply clarify for students a pathway to acquiring a specific set of skills and knowledge that are already available at Youngstown State University.

The B.S. Certificate in Molecular Biology and Biotechnology is designed to give the student a competitive edge in obtaining career opportunities in pharmaceuticals, biomedical, biotechnology, recombinant DNA technology based fields as well a broader opportunities. This is a research and techniques focused curriculum that emphasizes the molecular biology sciences.

Criteria for admission to the certificate program: Due to the research-intensive aspects of this program, a limited number of competitive candidates will be selected for participation in the Certificate. Minimum requirements for admission to the Certificate in Molecular Biology and Biotechnology are: 1) completion of the prerequisite course in the certificate curriculum and 2) a 3.0 GPA. Admission to the program is determined by the program coordinator (Departmental Chair) after review of formal application.

To receive the certificate in Molecular Biology and Biotechnology, students must complete 35-38 semester hours and maintain a grade point average of 3.0 or better in their required and elective courses in the certificate program.

Admission to the program is determined by the program coordinator (Departmental Chair) after review of formal application.

Prerequisites for admission to the Molecular Biology and Biotechnology certificate.

These prerequisite courses are designed to select for the students that will be successful in the molecular biology and biotechnology fields. They all apply to the BS or BA degree program.

<table>
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<td>4</td>
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<td>BIOL 2602 &amp; 2602L</td>
<td>General Biology: Organisms and Ecology and General Biology: Organisms and Ecology Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 3721</td>
<td>Genetics</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 3702 &amp; 3702L</td>
<td>Microbiology and Microbiology Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>OR</td>
<td>Cell Biology: Fine Structure</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total of Prerequisites BIOL courses: 14-15 s.h.

Required Certificate Courses

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
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</tr>
</thead>
<tbody>
<tr>
<td>BIOL 4890</td>
<td>Molecular Genetics</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 4800 &amp; 4800L</td>
<td>Bioinformatics and Bioinformatics Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 4850 A-Z Problems Course. Pick one course number specific to the topic/instructor</td>
<td>1 s.h. then 2 s.h. with same instructor</td>
<td></td>
</tr>
<tr>
<td>BIOL 5827</td>
<td>Gene Manipulation</td>
<td>2</td>
</tr>
<tr>
<td>CHEM 3785</td>
<td>Biochemistry 1</td>
<td>2</td>
</tr>
<tr>
<td>CHEM 3786</td>
<td>Advanced Organic Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 3787</td>
<td>Advanced Organic Chemistry Laboratory</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 4836</td>
<td>Cell Biology: Molecular Mechanisms</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 4890L</td>
<td>Molecular Genetics Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 4873</td>
<td>Cell Biology: Protein Biology Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 4837</td>
<td>Cell Biology: Molecular Mechanisms</td>
<td>3</td>
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<td>BIOL 4801 &amp; 4801L</td>
<td>Environmental Microbiology and Environmental Microbiology Laboratory</td>
<td>4</td>
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<tr>
<td>BIOL 3730</td>
<td>Human Physiology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 3745 or BIOL 4829</td>
<td>Plant Physiology or Microbial Physiology</td>
<td>2</td>
</tr>
<tr>
<td>BIOL 4893</td>
<td>Biology of Proteins</td>
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<td>Cancer Biology</td>
<td>2</td>
</tr>
<tr>
<td>BIOL 4848</td>
<td>Biology of Fungi</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 5823</td>
<td>Advanced Eukaryotic Genetics</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 5840</td>
<td>Advanced Microbiology</td>
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</tbody>
</table>

**Subtotal of elective BIOL courses: 6-8 s.h.

Learning Outcomes

- The student will learn research approaches to modern questions in molecular biology by experiencing a research intensive environment.
- The student will learn and master scientific approaches and perspective of problems involving the molecular biology of living organisms. With his molecular perspective and context, will develop in the student a high level of problem solving ability.
- The student will become skilled in biotechnology techniques and methods.

Chemical Sciences

Chemistry

Ward Beecher Science Hall, Room 5053
Youngstown State University
Youngstown, OH 44555
(330) 941-3664
Dr. Tim R. Wagner, Chair (trwagner@ysu.edu)

Chemistry is comprised of 14 full-time faculty, 10 adjunct & part time faculty, 3 staff members, over 120 majors in its BS & BA Chemistry and BS Biochemistry programs, and an active MS program with 16 students. The department is exceptionally well-equipped in research instrumentation, and offers a rich, hands-on ‘learning through research’ experience for its students. State-of-the-art laboratory facilities include NMR, X-ray diffraction (powder
and single crystal), electron microscopy (scanning & transmission), and a variety of analytical instrumentation. As part of the College of STEM, the department also participates in the YSU Ph.D. program in Materials Science and Engineering.

Our BS Chemistry program is accredited by the American Chemical Society (ACS), one of the largest scientific societies in the world. Students completing an accredited program are considered to be especially well-trained for the chemistry profession, thus the BS degree is recommended for those students who plan to make a career in industrial chemistry or pursue a graduate degree in chemistry. The BA degree is recommended for those who plan to go into a medical, pharmacy, or dental field and for those who plan to enter business or secondary education careers related to chemistry. The BS Biochemistry degree integrates the chemical and biological sciences for students interested in developing a deep understanding of the molecular and chemical processes of living organisms. Students completing this program will be especially well-prepared for further studies in medicine or graduate school programs in biochemistry, or for related careers in the chemical industry.

Each student majoring in chemistry or biochemistry will be assigned a faculty advisor by the department. The advisor will discuss the overall curriculum necessary for your degree program and will assist you in the preparation of a suitable course sequence and choice of a minor or minors if applicable.

For further information, click on the tabs above or visit the Chemistry (http://chemistry.ysu.edu/) home page.

Chair
Timothy R. Wagner, Ph.D., Professor, Acting Chair
Professor
Christopher Arntsen, Ph.D., Assistant Professor
Ganesaratnam K. Balendiran, Ph.D., Professor
Susan Ann Clutter, M.F.S., Associate Professor
Douglas T. Genna, Ph.D., Associate Professor
Allen D. Hunter, Ph.D., Professor
John A. Jackson, Ph.D., Professor
Brian D. Leskiw, Ph.D., Professor
Clovis Linkous, Ph.D., Professor
Sherri R. Lovelace-Cameron, Ph.D., Professor
Peter Norris, Ph.D., Professor
Michael A. Serra, Ph.D., Associate Professor
Josef B. Simeonsson, Ph.D., Professor
Wim F.A. Steelant, Ph.D., Professor
Nina V. Stourman, Ph.D., Associate Professor
Robert E. Wardle, M.S., Associate Professor

Majors
- BS in Chemistry (p. 436)
- BA in Chemistry (p. 434)
- BS in Biochemistry (p. 437)
- BS in Biochemistry, BaccMed Track (p. 439)

Minors
- Chemistry Minor (p. 440)

CHEM 1500 Chemistry in Modern Living 3 s.h.
Introduction to basic chemical concepts, the scientific method, and the impact of chemistry on human life and society. Examples may include water treatment, air quality, plastics, drugs, cosmetics, energy resources, food, and the chemical basis of life. Not intended for Chemistry majors.
Gen Ed: Natural Science.

CHEM 1500L Chemistry in Modern Living Laboratory 1 s.h.
Introduction to basic laboratory techniques designed to supplement CHEM 1500. Three hours per week.
Concurrent with: CHEM 1500.

CHEM 1501 An Introduction to Chemistry 3 s.h.
Metric units, dimensional analysis, chemical nomenclature, the mole concept, chemical stoichiometry. Emphasis on problem solving and the mathematics required for success in the study of chemistry. For students without high school chemistry and others needing preparation for CHEM 1510 or CHEM 1515. Three hours lecture, no laboratory.
Prereq.: "C" or better in MATH 1510 or Level 20 on the MPT or one unit each of high school algebra and geometry.

CHEM 1505L Allied Health Chemistry 1 Laboratory 0 s.h.
Allied Health Chemistry 1 Laboratory.

CHEM 1505R Recitation for Allied Health Chemistry 1 1 s.h.
Discussion and problem solving exercises to complement and enhance study in CHEM 1505.
Concurrent with: CHEM 1505.

CHEM 1506L Allied Health Chemistry 2 Laboratory 0 s.h.
Allied Health Chemistry 2 Laboratory.

CHEM 1506R Recitation for Allied Health Chemistry 2 1 s.h.
Discussion and problem solving exercises to complement and enhance study in CHEM 1506.
Concurrent with: CHEM 1506.

CHEM 1510 Chemistry for the Allied Health Sciences 4 s.h.
An overview of general, organic, and biochemistry. General chemistry introduces basic principles of chemistry. Organic chemistry examines the physical and chemical properties of molecules based on their functional groups. Biochemistry applies these chemistry concepts to the living organism. Intended for majors in allied health and other applied sciences. Three hours lecture, three hours laboratory.
Prereq.: "C" or better CHEM 1501 or equivalent, Level 20 or better on the MPT.
Gen Ed: Natural Science.

CHEM 1510L Chemistry for the Allied Health Sciences Laboratory 0 s.h.
Laboratory for the allied health chemistry course.
Concurrent: CHEM 1510.

CHEM 1510R Chemistry for the Allied Health Sciences Recitation 1 s.h.
Discussion and problem solving exercises to complement and enhance study in CHEM 1510.
Concurrent: CHEM 1510.

CHEM 1515 General Chemistry 1 4 s.h.
An introduction to the fundamental principles of chemistry, including measurement and calculation; chemical stoichiometry; the properties of gases; atomic and molecular structure; bonding; thermochemistry; and periodic properties. Intended for majors in the natural sciences and engineering. Three hours lecture, three hours lab-discussion.
Prereq.: "C" or better in CHEM 1501 or equivalent; "C" or better in MATH 1513 or "C" or better in MATH 1510.
Coreq.: CHEM 1515L; CHEM 1515R if major or repeating CHEM 1515.
Gen Ed: Natural Science.

CHEM 1515L General Chemistry 1 Laboratory 0 s.h.
General Chemistry 1 Laboratory.
CHEM 1515R Recitation for General Chemistry 1 1 s.h.
Discussion and problem solving based on current material in CHEM 1515.
Required for chemistry majors or for those repeating CHEM 1515.
Concurrent with: CHEM 1515.

CHEM 1516 General Chemistry 2 4 s.h.
A continuation of the study of the principles of chemistry, including solution properties; acids and bases; chemical equilibrium; thermodynamics; reaction kinetics; and electrochemistry. Intended for majors in the natural sciences and engineering. Three hours lecture, three hours lab-discussion.
Prereq.: "C" or better in CHEM 1515; Concurrent: CHEM 1516L; CHEM 1516R if major or repeating CHEM 1516.
Gen Ed: Natural Science.

CHEM 1516L General Chemistry 2 Laboratory 0 s.h.
General Chemistry 2 Laboratory.

CHEM 1516R Recitation for General Chemistry 2 1 s.h.
Discussion and problem solving based on current material in CHEM 1516.
Required for chemistry majors or for those repeating CHEM 1516.
Concurrent with: CHEM 1516.

CHEM 1520 Allied Health Chemistry for Online Programs 3 s.h.
An overview of general, organic, and biochemistry. General chemistry introduces basic principles of chemistry. Organic chemistry examines the physical and chemical properties of molecules based on their functional groups. Biochemistry applies these chemistry concepts to the living organism. Intended for students in the accelerated RN to BSN program.
Gen Ed: Natural Science.

CHEM 2602 African and African-American Contributions to Science 3 s.h.
Introduction to basic science concepts, the scientific method, and the impact of chemistry as a central science on society. Examples include works of African-American scientists.

CHEM 2604 Quantitative Analysis 5 s.h.
Chemical equilibrium, stoichiometry, theory of errors, and volumetric and gravimetric procedures as applied to quantitative determinations. Introduction to electroanalytical, chromatographic and spectrophotometric methods. Emphasis on development of technique. Three hours lecture, six hours lab.
Prereq.: CHEM 1516.

CHEM 2604L Quantitative Analysis Laboratory 0 s.h.
Quantitative Analysis Laboratory.

CHEM 2650 Introduction to Undergraduate Research 1-2 s.h.
Introduction to the methods of chemical research under the direction of a faculty member. May include literature search and analysis, instructional laboratory development, and/or original basic or applied research. May be repeated to a maximum of 4 s.h.
Prereq. or concurrent: CHEM 1516 and approval of department chairperson.

CHEM 3719 Organic Chemistry 1 4 s.h.
Organic compounds, reactions and theories. Typical preparations and procedures of analysis. Three hours lecture, three hours lab-discussion.
Prereq.: "C" or better in CHEM 1516.

CHEM 3719L Organic Chemistry 1 Laboratory 0 s.h.
Organic Chemistry 1 Laboratory.

CHEM 3719R Organic Chemistry Recitation 1 1 s.h.
An introduction to the preparation and analysis of organic compounds. Discussion of CHEM 3719 material and approaches to problem solving. Required for chemistry majors.
Concurrent with: CHEM 3719.

CHEM 3720 Organic Chemistry 2 4 s.h.
Organic compounds, reactions and theories. Typical preparations and procedures of analysis. Three hours lecture, three hours lab-discussion.
Prereq.: "C" or better in CHEM 3719.

CHEM 3720L Organic Chemistry 2 Laboratory 0 s.h.
Organic Chemistry 2 Laboratory.

CHEM 3720R Organic Chemistry Recitation 2 1 s.h.
An introduction to the preparation and analysis of organic compounds. Discussion of CHEM 3720 material and approaches to problem solving. Required for chemistry majors.
Concurrent with: CHEM 3720.

CHEM 3729 Inorganic Chemistry 3 s.h.
Fundamental principles underlying the structure, bonding, and properties of the elements and molecular, solid state, and coordination compounds.
Prereq. or concurrent: CHEM 3739.

CHEM 3739 Physical Chemistry 1 3 s.h.
Principles and applications of thermodynamics and kinetics to chemical systems.
Prereq.: "C" or better in CHEM 3720, PHYS 2610, MATH 1572.

CHEM 3739L Physical Chemistry 1 Laboratory 1 s.h.
Quantitative thermodynamic and kinetic measurements of chemical systems.
Prereq. or Coreq.: CHEM 3739.

CHEM 3740 Physical Chemistry 2 3 s.h.
Principles and applications of quantum mechanics and statistical thermodynamics to chemical systems. Three hours lecture.
Prereq.: "C" or better in CHEM 3739; PHYS 2611, MATH 2673.

CHEM 3740L Physical Chemistry 2 Laboratory 1 s.h.
Spectroscopy and computational measurements of chemical systems. Prereq. or Coreq.: CHEM 3740.

CHEM 3761 Introduction to Polymer Chemistry 1 s.h.
Survey of polymer chemistry for representative classes of organic polymers, their preparation, characterization, and structure-property relationships.
Prereq.: CHEM 3720.

CHEM 3764 Chemical Toxicology 3 s.h.
Introduction to the basic principles of toxicology: disposition of toxic agents, focus on the effect that chemical structure has on biotransformation and the mechanism of action of chemicals on living organisms. Prereq.: CHEM 3720.

CHEM 3785 Biochemistry 1 3 s.h.
Structure and function of proteins, nucleic acids, and carbohydrates. Includes techniques of protein purification and analysis, the study of enzyme catalysis and kinetics. Study of the organization and regulation of metabolic pathways: glycolysis, the citric acid cycle, and oxidative phosphorylation.
Prereq.: "C" or better in CHEM 3720.

CHEM 3785L Biochemistry Laboratory 1 s.h.
Analysis and separation techniques of biochemistry. Three hours lab-discussion.
Prereq. or concurrent: CHEM 3785.

CHEM 3786 Biochemistry 2 3 s.h.
Continues the study of the organization and regulation of metabolic pathways: glycolgen metabolism, the pentose phosphate pathway, amino acid, lipid, and nucleic acid metabolism. Biochemical information pathways including replication, transcription, and translation followed by the regulation of gene expression.
Prereq.: "C" or better in CHEM 3785.

CHEM 3790 Undergraduate Seminar 1 s.h.
Students participate in departmental seminars and present a seminar to the class. May be repeated once.
Prereq. or concurrent: CHEM 3785.

CHEM 4850 Chemistry Research 1 s.h.
Research planning, design, and execution including literature survey techniques, proposal writing, and critical scientific analysis. The student gives an oral presentation of a research proposal for CHEM 4850L, or on another topic as approved by the instructor.
Prereq.: CHEM 2604 or CHEM 3719 and approval of department chairperson.
Gen Ed: Capstone.
CHEM 4851 Chemistry Research Project 2-3 s.h.
Research participation under the direction of a faculty member. The student prepares an acceptable written report on the completed project. May be repeated to a maximum of 5 semester hours. Prereq. CHEM 4850 and approval of department chairperson.

CHEM 4860 Regulatory Aspects of Industrial Chemistry 1 s.h.

CHEM 4891 Special Topics 1-3 s.h.
Topics selected by the faculty from fields of current research interest or of special emphasis. May be repeated with different topics.

CHEM 5804 Chemical Instrumentation 4 s.h.
The theoretical foundations of instrumental procedures and the use of instruments in analytical work. Two hours lecture, six hours lab. Prereq.: CHEM 3739.

CHEM 5804L Chemical Instrumentation Laboratory 0 s.h.
Chemical Instrumentation Laboratory.

CHEM 5821 Intermediate Organic Chemistry 3 s.h.
An intermediate treatment of organic chemistry building on the principles introduced at the sophomore level. Emphasis on curved arrow notation in mechanism and the planning of organic syntheses. Structural analysis of organic compounds using NMR, IR and MS and the application of structural knowledge to questions of mechanism. Prereq.: CHEM 3720.

CHEM 5822 Advanced Organic Laboratory 4 s.h.
An advanced approach to the applications of organic chemistry in the laboratory. Synthesis and purification of organic molecules using modern techniques, structure elucidation using spectroscopic techniques. Lecture discussion includes use of instrumentation, planning of practical syntheses, use of the primary chemical literature and safety in the laboratory. Two hours lecture, six hours lab. Prereq.: CHEM 3720.

CHEM 5822L Advanced Organic Laboratory 0 s.h.
Advanced Organic Laboratory.

CHEM 5830 Intermediate Inorganic Chemistry 2 s.h.
Reactions and descriptive chemistry of transition metal, organometallic, and main-group compounds. Prereq.: CHEM 3729, CHEM 3740 (may be concurrent).

CHEM 5831L Inorganic Chemistry Laboratory 2 s.h.
Preparation of typical inorganic compounds and their characterization. Six hours lab-discussion. Prereq. or s.h. Coreq.: CHEM 3729 and CHEM 3739.

CHEM 5832 Solid State Structural Methods 3 s.h.
The determination of structures of biological, organic, and inorganic materials in the solid state. Introduction to the crystalline state, defects, diffraction of waves, powder and single crystal diffraction methods of neutron and x-ray analysis, electron microscopy, and solid state NMR. Two hours lecture, three hours lab. Prereq.: CHEM 3729.

CHEM 5832L Solid State Structural Methods Laboratory 0 s.h.
Solid State Structural Methods Laboratory.

CHEM 5836 Quantum Chemistry 3 s.h.
Basic principles of quantum chemistry, with applications to problems in molecular structure, spectroscopy and thermodynamics. Prereq.: CHEM 3740.

CHEM 5861 Polymer Science 1: Polymer Chemistry and Plastics 3 s.h.
Preparation, characterization, structure-property relationships, morphology, and uses of the major commercial polymers. Two hours lecture, three hours lab. Prereq.: CHEM 3739.

CHEM 5861L Polymer Science 1: Polymer Chemistry and Plastics Laboratory 0 s.h.
Polymer Science 1: Polymer Chemistry and Plastics Laboratory.

CHEM 5862 Polymer Science 2: Polymer Rheology, Processing, and Composites 3 s.h.
Polymer rheology, processing methods, and materials characterization. The effects of additives and the major classes of thermoplastic, thermoset, elastomeric, and composite materials. Two hours lecture, three hours lab. Prereq.: CHEM 5861 or consent of the chairperson.

CHEM 5862L Polymer Science 2: Polymer Rheology, Processing, and Composites Laboratory 0 s.h.
Polymer Science 2: Polymer Rheology, Processing, and Composites Laboratory.

CHEM 5876 Enzyme Analysis 2 s.h.
Advanced biochemistry laboratory focusing on the methods of enzyme purification and characterization. One hour lecture, two hours lab. Prereq.: CHEM 3785 or equivalent and CHEM 3785L or equivalent.

Bachelor of Arts in Chemistry

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
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<tbody>
<tr>
<td></td>
<td>FIRST YEAR REQUIREMENT -STUDENT SUCCESS</td>
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<tr>
<td></td>
<td>YSU 1500</td>
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<td></td>
<td>or SS 1500</td>
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<td></td>
<td>or HONR 1500</td>
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<tr>
<td></td>
<td>Intro to Honors</td>
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<tr>
<td></td>
<td>General Education Requirements</td>
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</tr>
<tr>
<td>ENGL 1550</td>
<td>Writing 1</td>
<td>3-4</td>
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<tr>
<td>or ENGL 1549</td>
<td>Writing 1 with Support</td>
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</tr>
<tr>
<td>ENGL 1551</td>
<td>Writing 2</td>
<td>3</td>
</tr>
<tr>
<td>CMST 1545</td>
<td>Communication Foundations</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Mathematics requirement (met with MATH in major)</td>
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<tr>
<td></td>
<td>Some courses are categorized in more than one knowledge domain. Courses can only be used once within the GE model.</td>
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<tr>
<td></td>
<td>Arts and Humanities (6 s.h.)</td>
<td>6</td>
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<tr>
<td></td>
<td>Natural Sciences (2 courses, 1 with lab) (6-7 s.h.)</td>
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<tr>
<td></td>
<td>Requirement is met through science courses in the major</td>
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<tr>
<td></td>
<td>Social Science (6 s.h.)</td>
<td>6</td>
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<tr>
<td></td>
<td>Social and Personal Awareness (6 s.h.)</td>
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<tr>
<td></td>
<td>Foreign Language</td>
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<tr>
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<td>Foreign Language 1550</td>
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<tr>
<td></td>
<td>Foreign Language 2600</td>
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<tr>
<td></td>
<td>The following CHEM core courses are required (29 s.h.):</td>
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<td></td>
<td>Grade of &quot;C&quot; or better is required. Courses cannot be taken &quot;CR/NC&quot;</td>
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<tr>
<td>CHEM 1515</td>
<td>General Chemistry 1</td>
<td>4</td>
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<td>&amp; 1515L</td>
<td>General Chemistry 1 Laboratory</td>
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<td>CHEM 1515R</td>
<td>Recitation for General Chemistry 1</td>
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<tr>
<td>CHEM 1516</td>
<td>General Chemistry 2</td>
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<td>&amp; 1516L</td>
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<td>CHEM 1516R</td>
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<td>CHEM 2604</td>
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<td>&amp; 2604L</td>
<td>Quantitative Analysis Laboratory</td>
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<td>CHEM 3719</td>
<td>Organic Chemistry 1</td>
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<tr>
<td>CHEM 3719R</td>
<td>Organic Chemistry Recitation 1</td>
<td>1</td>
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</table>
The following capstone is required (1 s.h.):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 4850</td>
<td>Chemistry Research</td>
<td>1</td>
</tr>
</tbody>
</table>

The following non-CHEM courses are required (18 s.h.):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1571</td>
<td>Calculus 1</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1572</td>
<td>Calculus 2</td>
<td>4</td>
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<tr>
<td>PHYS 2610 &amp; 2610L</td>
<td>General Physics 1 and General Physics Laboratory 1</td>
<td>5</td>
</tr>
<tr>
<td>PHYS 2611 &amp; 2611L</td>
<td>General Physics 2 and General Physics laboratory 2</td>
<td>5</td>
</tr>
</tbody>
</table>

Electives:

Select 9 s.h. of upper-level CHEM electives (3000 or higher) from the list below:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 3729</td>
<td>Inorganic Chemistry</td>
<td>9</td>
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<tr>
<td>CHEM 3740 &amp; 3740L</td>
<td>Physical Chemistry 2 and Physical Chemistry 2 Laboratory</td>
<td>5</td>
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<tr>
<td>CHEM 3764</td>
<td>Chemical Toxicology</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 3785</td>
<td>Biochemistry 1</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 3785L</td>
<td>Biochemistry Laboratory</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 3786</td>
<td>Biochemistry 2</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 3790</td>
<td>Undergraduate Seminar</td>
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<td>CHEM 4850L</td>
<td>Chemistry Research Laboratory</td>
<td>3</td>
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<tr>
<td>CHEM 4860</td>
<td>Regulatory Aspects of Industrial Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 4891</td>
<td>Special Topics</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 5804 &amp; 5804L</td>
<td>Chemical Instrumentation and Chemical Instrumentation Laboratory</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 5821</td>
<td>Intermediate Organic Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 5822 &amp; 5822L</td>
<td>Advanced Organic Laboratory and Advanced Organic Laboratory</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 5830</td>
<td>Intermediate Inorganic Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 5832 &amp; 5832L</td>
<td>Solid State Structural Methods and Solid State Structural Methods Laboratory</td>
<td>3</td>
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<tr>
<td>CHEM 5836</td>
<td>Quantum Chemistry</td>
<td>3</td>
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<td>CHEM 5861 &amp; 5861L</td>
<td>Polymer Science 1: Polymer Chemistry and Plastics and Polymer Science 1: Polymer Chemistry and Plastics Laboratory</td>
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<tr>
<td>CHEM 5862 &amp; 5862L</td>
<td>Polymer Science 2: Polymer Rheology, Processing, and Composites and Polymer Science 2: Polymer Rheology, Processing, and Composites Laboratory</td>
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</tr>
<tr>
<td>CHEM 5876</td>
<td>Enzyme Analysis</td>
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</table>

27 s.h. of additional electives required, 24 s.h. of which must be upper level. These electives should include courses needed to fulfill requirements of the minor.

Total Semester Hours 120-122

Year 1

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Fall Semester Hours</th>
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<tbody>
<tr>
<td>YSU 1500</td>
<td>Success Seminar</td>
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<tr>
<td>CHEM 1515 &amp; 1515L &amp; 1515R</td>
<td>General Chemistry 1 and General Chemistry 1 Laboratory and Recitation for General Chemistry 1</td>
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<tr>
<td>MATH 1571</td>
<td>Calculus 1</td>
<td>4</td>
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<tr>
<td>ENGL 1550 or ENGL 1549</td>
<td>Writing 1 or Writing 1 with Support</td>
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</table>

Semester Hours 13-14

Year 2

<table>
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<tr>
<th>Course</th>
<th>Title</th>
<th>Fall Semester Hours</th>
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</thead>
<tbody>
<tr>
<td>CHEM 1516 &amp; 1516L &amp; 1516R</td>
<td>General Chemistry 2 and General Chemistry 2 Laboratory and Recitation for General Chemistry 2</td>
<td>5</td>
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<tr>
<td>MATH 1572</td>
<td>Calculus 2</td>
<td>4</td>
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<tr>
<td>ENGL 1551</td>
<td>Writing 2</td>
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<td>GER</td>
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Semester Hours 15

Semester Hours 15

Year 3

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Fall Semester Hours</th>
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</thead>
<tbody>
<tr>
<td>CHEM 3739 &amp; 3739L</td>
<td>Physical Chemistry 1 and Physical Chemistry 1 Laboratory</td>
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<tr>
<td>FNLG 1550</td>
<td>Elementary Foreign Language</td>
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<tr>
<td>Electives</td>
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<td>GER</td>
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Semester Hours 16

Spring

<table>
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<tr>
<th>Course</th>
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<tbody>
<tr>
<td>FNLG 2600</td>
<td>Intermediate Foreign Language</td>
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<tr>
<td>Upper-Level Chemistry Elective</td>
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<tr>
<td>Upper-Level Electives</td>
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<tr>
<td>GER</td>
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Semester Hours 15

Year 4

<table>
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<th>Fall Semester Hours</th>
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<tbody>
<tr>
<td>CHEM 4850</td>
<td>Chemistry Research</td>
<td>1</td>
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<tr>
<td>CMST 1545</td>
<td>Communication Foundations</td>
<td>3</td>
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<tr>
<td>Upper-Level Chemistry Elective</td>
<td></td>
<td>3</td>
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<tr>
<td>Upper Level GER Elective</td>
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<tr>
<td>Upper-Level Electives</td>
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Semester Hours 15

Spring

<table>
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<tr>
<th>Course</th>
<th>Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upper-Level Chemistry Elective</td>
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<tr>
<td>Upper-Level Electives</td>
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<td>11</td>
</tr>
</tbody>
</table>

Total Semester Hours 14

Total Semester Hours 119-120

Electives must include courses to fulfill the students' chosen minor. Typically for Chemistry majors, the minor will be in Mathematics, Physics, or Biology.
Learning Outcomes

- Undergraduate students will demonstrate an understanding of the basic principles of the chemical disciplines included in their curriculum.
- Undergraduate students will demonstrate independent and critical thinking.
- Undergraduate students will demonstrate an understanding of the fundamentals of modern chemical instrumentation.
- Undergraduate students will effectively communicate their ideas both orally and in writing.

Bachelor of Science in Chemistry

COURSE | TITLE | S.H.
--- | --- | ---
**FIRST YEAR REQUIREMENT - STUDENT SUCCESS**
YSU 1500 | Success Seminar | 1-2
or SS 1500 | Strong Start Success Seminar | 1-2
or HONR 1500 | Intro to Honors | 1-2

General Education Requirements

ENGL 1550 | Writing 1 | 3-4
or ENGL 1549 | Writing 1 with Support | 3-4
ENGL 1551 | Writing 2 | 3
CMST 1545 | Communication Foundations | 3

Mathematics requirement (met through MATH in major)

Some courses are categorized in more than one Knowledge Domain. Courses can only be used once within the GE model.

Arts and Humanities (6 s.h.)

Natural Sciences (2 courses, 1 with lab) (6-7 s.h.)

Requirement is met through science courses in the major.

Social Science (6 s.h.)

Social and Personal Awareness (6 s.h.)

The following CHEM core courses are required (39 s.h.)

Grade of "C" or better is required. Courses cannot be taken "CR/NC".

CHEM 1515 & 1515L | General Chemistry 1 and General Chemistry 1 Laboratory | 4
CHEM 1515R | Recitation for General Chemistry 1 | 1
CHEM 1516 & 1516L | General Chemistry 2 and General Chemistry 2 Laboratory | 4
CHEM 1516R | Recitation for General Chemistry 2 | 1
CHEM 2604 & 2604L | Quantitative Analysis and Quantitative Analysis Laboratory | 5
CHEM 3719 & 3719L | Organic Chemistry 1 and Organic Chemistry 1 Laboratory | 4
CHEM 3719R | Organic Chemistry Recitation 1 | 1
CHEM 3720 & 3720L | Organic Chemistry 2 and Organic Chemistry 2 Laboratory | 4
CHEM 3720R | Organic Chemistry Recitation 2 | 1
CHEM 3729 | Inorganic Chemistry | 3
CHEM 3739 & 3739L | Physical Chemistry 1 and Physical Chemistry 1 Laboratory | 4
CHEM 3740 & 3740L | Physical Chemistry 2 and Physical Chemistry 2 Laboratory | 4
CHEM 3785 | Biochemistry 1 | 3

The following capstone is required (3 s.h.)

CHEM 4850 | Chemistry Research | 1
CHEM 4850L | Chemistry Research Laboratory | 2

The following non-CHEM courses are required (22 s.h.)

MATH 1571 | Calculus 1 | 4
MATH 1572 | Calculus 2 | 4

MATH 2673 | Calculus 3 | 4
PHYS 2610 | General Physics 1 | 5
PHYS 2610L | General Physics Laboratory 1 | 5
PHYS 2611 | General Physics 2 | 5
PHYS 2611L | General Physics Laboratory 2 | 5

Electives:

Select 12 hours of upper-division chemistry electives (from the list below) | 12
4 hours of which must be in upper-division laboratory.

CHEM 3764 | Chemical Toxicology | 3-4
CHEM 3785L | Biochemistry Laboratory | 3-4
CHEM 3786 | Biochemistry 2 | 1
CHEM 3790 | Undergraduate Seminar | 3-4
CHEM 4850L | Chemistry Research Laboratory | 3-4
CHEM 4860 | Regulatory Aspects of Industrial Chemistry | 3-4
CHEM 4891 | Special Topics | 3-4
CHEM 5804 | Chemical Instrumentation | 3-4
CHEM 5804L | Chemical Instrumentation Laboratory | 3-4
CHEM 5821 | Intermediate Organic Chemistry | 3-4
CHEM 5822 & 5822L | Advanced Organic Laboratory and Advanced Organic Laboratory | 3-4
CHEM 5830 | Intermediate Inorganic Chemistry | 3-4
CHEM 5832 & 5832L | Solid State Structural Methods and Solid State Structural Methods Laboratory | 3-4
CHEM 5836 | Quantum Chemistry | 3-4
CHEM 5861 & 5861L | Polymer Science 1: Polymer Chemistry and Plastics and Polymer Science 1: Polymer Chemistry and Plastics Laboratory | 3-4
CHEM 5862 & 5862L | Polymer Science 2: Polymer Rheology, Processing, and Composites and Polymer Science 2: Polymer Rheology, Processing, and Composites Laboratory | 3-4

16 s.h. of additional hours required, 9 s.h. of which must be upper-level. These electives should include courses needed to fulfill requirements of the minor.

Total Semester Hours | 120-122

Year 1

Fall | S.H.
--- | ---
YSU 1500 | Success Seminar | 1
CHEM 1515 & 1515L | General Chemistry 1 and General Chemistry 1 Laboratory | 4
CHEM 1515R | Recitation for General Chemistry 1 | 1
CHEM 1571 | Calculus 1 | 4
ENGL 1550 | Writing 1 | 3-4
or ENGL 1549 | Writing 1 with Support | 3-4

Semester Hours | 13-14

Spring

CHEM 1516 & 1516L | General Chemistry 2 and General Chemistry 2 Laboratory | 4
CHEM 1516R | Recitation for General Chemistry 2 | 1
MATH 1572 | Calculus 2 | 4
ENGL 1551 | Writing 2 | 3
GER | 3

Year 2

Fall

CHEM 3719 & 3719L | Organic Chemistry 1 and Organic Chemistry 1 Laboratory | 4
CHEM 3719R | Organic Chemistry Recitation 1 | 1

Semester Hours | 15
### Bachelor of Science in Biochemistry

The Bachelor of Science degree in Biochemistry is recommended for those students interested in integrating the subjects of biology and chemistry. The cross-disciplinary nature of the degree provides students with a good foundation for careers in research and development in the private sector and in academia. Many will continue their education in graduate schools or in health related fields such as medicine, dentistry, or pharmacy.

For further information, please see the Chemical Sciences (p. 431) overview page.

#### COURSE | TITLE | S.H.
---|---|---
**FIRST YEAR REQUIREMENT - STUDENT SUCCESS**<br>YSU 1500 | Success Seminar | 1-2<br>or SS 1500 | Strong Start Success Seminar | 1-2<br>or HONR 1500 | Intro to Honors | 1-2

#### General Education Requirements<br>ENGL 1550 | Writing 1 | 3-4<br>or ENGL 1549 | Writing 1 with Support | 3-4<br>ENGL 1551 | Writing 2 | 3<br>CMST 1545 | Communication Foundations | 3<br>Mathematics requirement (met with MATH in major)

Some courses are categorized in more than one Knowledge Domain. Courses can only be used once within the GE model.

**Arts and Humanities (6 s.h.)**<br>Some science courses are categorized in more than one Knowledge Domain. Courses can only be used once within the GE model.

**Social Sciences (2 courses, 1 with lab)**<br>This requirement is met through courses in the major.

**Electives**<br>This requirement is met through courses in the major.

**Social and Personal Awareness (6 s.h.)**<br>Some science courses are categorized in more than one Knowledge Domain. Courses can only be used once within the GE model.

**The following CHEM core courses are required:**

CHEM 1515 & 1515L | General Chemistry 1 and General Chemistry 1 Laboratory | 4<br>CHEM 1515R | Recitation for General Chemistry 1 | 1<br>CHEM 1516 & 1516L | General Chemistry 2 and General Chemistry 2 Laboratory | 4<br>CHEM 1516R | Recitation for General Chemistry 2 | 1<br>CHEM 2604 & 2604L | Quantitative Analysis and Quantitative Analysis Laboratory | 5

**Bachelor of Science in Biochemistry**

Electives must include courses to fulfill the students chosen minor. Typically for Chemistry majors, the minor will be in Mathematics, Physics or Biology.

### Learning Outcomes

- **Undergraduate students will demonstrate an understanding of the basic principles of the chemical disciplines included in their curriculum.**
- **Undergraduate students will demonstrate independent and critical thinking.**
- **Undergraduate students will demonstrate an understanding of the fundamentals of modern chemical instrumentation.**
- **Undergraduate students will effectively communicate their ideas both orally and in writing.**
- **Undergraduate students will acquire basic research skills including planning and performing an experiment and analyzing the results.**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 2604</td>
<td>Quantitative Analysis and Quantitative Analysis Laboratory</td>
</tr>
<tr>
<td>PHYS 2610 &amp; 2610L</td>
<td>General Physics 1 and General Physics Laboratory 1</td>
</tr>
</tbody>
</table>

**Semester Hours:** 15

**Spring**<br>CHEM 3720 & 3720L | Organic Chemistry 2 and Organic Chemistry 2 Laboratory | 4<br>CHEM 3720R | Organic Chemistry Recitation 2 | 1<br>PHYS 2611 & 2611L | General Physics 2 and General Physics laboratory 2 | 5<br>MATH 2673 | Calculus 3 | 4

**Semester Hours:** 14

**Year 3**<br>Fall<br>CHEM 3739 & 3739L | Physical Chemistry 1 and Physical Chemistry 1 Laboratory | 4<br>CHEM 3729 | Inorganic Chemistry | 3<br>Elective | 3<br>GER | 6

**Semester Hours:** 16

**Spring**<br>CHEM 3740 & 3740L | Physical Chemistry 2 and Physical Chemistry 2 Laboratory | 4<br>Upper Level Chemistry Electives | 6<br>Elective | 3<br>GER | 3

**Semester Hours:** 16

**Year 4**<br>Fall<br>CHEM 4850 | Chemistry Research | 1<br>CHEM 4850L | Chemistry Research Laboratory | 2<br>CHEM 3785 | Biochemistry 1 | 3<br>Upper Level Chemistry Elective | 3<br>GER Speech Communications | 3<br>GER | 3

**Semester Hours:** 15

**Spring**<br>Upper Level CHEM Elective | 3<br>Upper Level Electives | 9<br>GER | 3

**Semester Hours:** 15

**Total Semester Hours:** 119-120
Bachelor of Science in Biochemistry

CHEM 5804 & 5804L
Chemical Instrumentation and Chemical Instrumentation Laboratory

CHEM 5821
Intermediate Organic Chemistry

CHEM 5822 & 5822L
Advanced Organic Laboratory and Advanced Organic Laboratory

CHEM 5832 & 5832L
Solid State Structural Methods and Solid State Structural Methods Laboratory

The following BIOL core courses are required (14 s.h.):

BIOL 2601 & 2601L
General Biology: Molecules and Cells and General Biology: Molecules and Cells Laboratory

BIOL 3702 & 3702L
Microbiology and Microbiology Laboratory

BIOL 3711
Cell Biology: Fine Structure

At least 3 s.h. in upper-level BIOL courses required from the list below; 5 s.h. recommended if needed to attain 120 s.h. required for graduation.

BIOL 4800 & 4800L
Bioinformatics and Bioinformatics Laboratory

BIOL 4801 & 4801L
Environmental Microbiology and Environmental Microbiology Laboratory

BIOL 4829
Microbial Physiology

BIOL 4836 & 4836L
Cell Biology: Molecular Mechanisms and Cell Biology: Molecular Mechanisms Laboratory

BIOL 4837
Cell Biology: Protein Biology Laboratory

BIOL 4890
Molecular Genetics

BIOL 4890L
Molecular Genetics Laboratory

BIOL 5840
Advanced Microbiology

The following support courses are required (22 s.h.):

MATH 1571
Calculus 1

MATH 1572
Calculus 2

STAT 3717
Statistical Methods

PHYS 2610
General Physics 1

PHYS 2610L
General Physics Laboratory 1

PHYS 2611
General Physics 2

PHYS 2611L
General Physics Laboratory 2

STAT 3717 or STAT 3743
Statistical Methods or Probability and Statistics

Year 1

Fall
YSU 1500
Success Seminar

CHEM 1515 & 1515L
General Chemistry 1 and General Chemistry 1 Laboratory

CHEM 1515R
Recitation for General Chemistry 1

MATH 1571
Calculus 1

ENGL 1549
Writing 1 with Support

Semester Hours
13-14

Spring

CHEM 1516 & 1516L
General Chemistry 2 and General Chemistry 2 Laboratory

CHEM 1516R
Recitation for General Chemistry 2

MATH 1572
Calculus 2

BIOL 2601 & 2601L
General Biology: Molecules and Cells and General Biology: Molecules and Cells Laboratory

ENGL 1551
Writing 2

Semester Hours
16

Semester Hours
120-122

Year 2

Fall

CHEM 3719 & 3719L
Organic Chemistry 1 and Organic Chemistry 1 Laboratory

CHEM 3719R
Organic Chemistry Recitation 1

CHEM 2604 & 2604L
Quantitative Analysis and Quantitative Analysis Laboratory

PHYS 2610
General Physics 1

PHYS 2610L
General Physics Laboratory 1

Semester Hours
15

Spring

CHEM 3720 & 3720L
Organic Chemistry 2 and Organic Chemistry 2 Laboratory

CHEM 3720R
Organic Chemistry Recitation 2

PHYS 2611
General Physics 2

PHYS 2611L
General Physics Laboratory 2

STAT 3717 or STAT 3743
Statistical Methods or Probability and Statistics

Semester Hours
14

Year 3

Fall

CHEM 3785
Biochemistry 1

CHEM 3785L
Biochemistry Laboratory

CHEM 3739 & 3739L
Physical Chemistry 1 and Physical Chemistry 1 Laboratory

BIOL 3721
Genetics

GER

Semester Hours
17

Spring

CHEM 3786
Biochemistry 2

CHEM 5876
Enzyme Analysis

BIOL 3711
Cell Biology: Fine Structure

BIOL 3702 & 3702L
Microbiology and Microbiology Laboratory

GER

Semester Hours
15

Year 4

Fall

CHEM 4850
Chemistry Research

CHEM 4850L
Chemistry Research Laboratory

CHEM Upper-Level Elective

CMST 1545
Communication Foundations

GER

Semester Hours
15

Spring

CHEM Upper-Level Elective

BIOL Upper-Level Elective

GER

Semester Hours
14

Total Semester Hours
119-120

Learning Outcomes

The undergraduate student learning outcomes for the major in biochemistry are as follows:

- Undergraduate students will demonstrate an understanding of the fundamentals of chemistry and biochemistry.
• Undergraduate students will demonstrate independent and critical thinking.
• Undergraduate students will demonstrate an understanding of the fundamentals of modern chemical instrumentation.
• Undergraduate students will be able to interpret experimental data.
• Undergraduate students will effectively communicate their ideas both orally and in writing.

Bachelor of Science in Biochemistry  
BaccMed Track

The Bachelor of Science degree in Biochemistry, BaccMed track, is specifically designed for students interested in seeking degrees as primary care physicians. The cross-disciplinary nature of the degree provides a student with a good foundation in the sciences, psychology, sociology, and public health. The student will not only be well prepared for the rigors of medical school, but he or she will also be aware of the issues facing health care professionals as well as be better able to deal with a diverse population.

For more information, please see the Chemical Sciences (p. 431) overview page.

Learning Outcomes

The learning objectives for the major in Biochemistry, BaccMed Track are as follows:

• Undergraduate students will demonstrate an understanding of the fundamentals of chemistry and biochemistry.
• Undergraduate students will demonstrate independent and critical thinking.
• Undergraduate students will demonstrate an understanding of the fundamentals of modern chemical instrumentation.
• Undergraduate students will be able to interpret experimental data.
• Undergraduate students will effectively communicate their ideas both orally and in writing.

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>YSU 1500</td>
<td>Success Seminar</td>
<td>1-2</td>
</tr>
<tr>
<td>or SS 1500</td>
<td>Strong Start Success Seminar</td>
<td></td>
</tr>
<tr>
<td>or HONR 1500</td>
<td>Intro to Honors</td>
<td></td>
</tr>
<tr>
<td>ENGL 1550</td>
<td>Writing 1</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 1551</td>
<td>Writing 2</td>
<td>3</td>
</tr>
<tr>
<td>CMST 1545</td>
<td>Communication Foundations</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1571</td>
<td>Calculus 1 (also required for the major)</td>
<td>4</td>
</tr>
<tr>
<td>Mathematics requirement included in the major.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Some courses are categorized in more than one knowledge domain.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Courses can only be used once within the General Education model.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arts &amp; Humanities (2 courses)</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Natural Sciences - NS requirement included in the major. (courses below are required for the BS Biochemistry major and fulfill the Natural Sciences General Education requirement)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEM 1515 &amp; 1515L</td>
<td>General Chemistry 1 and General Chemistry 1 Laboratory</td>
<td></td>
</tr>
<tr>
<td>CHEM 1516 &amp; 1516L</td>
<td>General Chemistry 2 and General Chemistry 2 Laboratory</td>
<td></td>
</tr>
<tr>
<td>Social Science: 2 courses, one must be PSYC 1560</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>PSYC 1560</td>
<td>General Psychology</td>
<td></td>
</tr>
<tr>
<td>Social &amp; Personal Awareness, 2 courses (6 s.h.):</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHLT 1531</td>
<td>Fundamentals of Public Health</td>
<td></td>
</tr>
<tr>
<td>SOC 3745</td>
<td>Sociology of Health, Illness, and Healthcare</td>
<td></td>
</tr>
</tbody>
</table>

The following CHEM core courses are required (38 s.h.):

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1515 &amp; 1515L</td>
<td>General Chemistry 1 and General Chemistry 1 Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 1515R</td>
<td>Recitation for General Chemistry 1</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 1516 &amp; 1516L</td>
<td>General Chemistry 2 and General Chemistry 2 Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 1516R</td>
<td>Recitation for General Chemistry 2</td>
<td>1</td>
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<tr>
<td>CHEM 2604 &amp; 2604L</td>
<td>Quantitative Analysis and Quantitative Analysis Laboratory</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 3719 &amp; 3719L</td>
<td>Organic Chemistry 1 and Organic Chemistry 1 Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 3719R</td>
<td>Organic Chemistry Recitation 1</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 3720 &amp; 3720L</td>
<td>Organic Chemistry 2 and Organic Chemistry 2 Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 3720R</td>
<td>Organic Chemistry Recitation 2</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 3739 &amp; 3739L</td>
<td>Physical Chemistry 1 and Physical Chemistry 1 Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 3785</td>
<td>Biochemistry 1</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 3785L</td>
<td>Biochemistry Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 3786</td>
<td>Biochemistry 2</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 5876</td>
<td>Enzyme Analysis</td>
<td>2</td>
</tr>
</tbody>
</table>

The following capstone is required (3 s.h.):

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 4850</td>
<td>Chemistry Research</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 4850L</td>
<td>Chemistry Research Laboratory</td>
<td>2</td>
</tr>
</tbody>
</table>

The following BIOL core courses are required (14 s.h.):

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 2603</td>
<td>Integrated Biology for BS/MD</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 3702 &amp; 3702L</td>
<td>Microbiology and Microbiology Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 3711</td>
<td>Cell Biology: Fine Structure</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 3721</td>
<td>Genetics</td>
<td>3</td>
</tr>
</tbody>
</table>

The following non-CHEM courses are required (22 s.h.):

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1581H</td>
<td>Honors Biomathematics 2</td>
<td>4</td>
</tr>
<tr>
<td>or MATH 1571</td>
<td>Calculus 1</td>
<td>1</td>
</tr>
<tr>
<td>MATH 1572</td>
<td>Calculus 2</td>
<td>4</td>
</tr>
<tr>
<td>STAT 3743</td>
<td>Probability and Statistics</td>
<td>4</td>
</tr>
<tr>
<td>or STAT 3717</td>
<td>Statistical Methods</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 2610 &amp; 2610L</td>
<td>General Physics 1 and General Physics Laboratory</td>
<td>5</td>
</tr>
<tr>
<td>PHYS 2611</td>
<td>General Physics 2</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 2611L</td>
<td>General Physics laboratory 2</td>
<td>1</td>
</tr>
</tbody>
</table>

Required Electives:

Select 7 s.h. in upper level CHEM electives (3000 or higher) from the list below. It is recommended that one elective course includes a laboratory.

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 3729</td>
<td>Inorganic Chemistry</td>
<td></td>
</tr>
<tr>
<td>CHEM 3764</td>
<td>Chemical Toxicology</td>
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</tr>
<tr>
<td>CHEM 4850L</td>
<td>Chemistry Research Laboratory</td>
<td></td>
</tr>
<tr>
<td>CHEM 4891</td>
<td>Special Topics</td>
<td></td>
</tr>
<tr>
<td>CHEM 5804 &amp; 5804L</td>
<td>Chemical Instrumentation and Chemical Instrumentation Laboratory</td>
<td></td>
</tr>
<tr>
<td>CHEM 5821</td>
<td>Intermediate Organic Chemistry</td>
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</tr>
<tr>
<td>CHEM 5822 &amp; 5822L</td>
<td>Advanced Organic Laboratory and Advanced Organic Laboratory</td>
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</tr>
<tr>
<td>CHEM 5832 &amp; 5832L</td>
<td>Solid State Structural Methods and Solid State Structural Methods Laboratory</td>
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</tbody>
</table>

At least 4 s.h. in upper-level BIOL courses required from the list below; 5 s.h. recommended if needed to attain 120 s.h. required for graduation.

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
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</thead>
<tbody>
<tr>
<td>BIOL 3703</td>
<td>Clinical Immunology</td>
<td></td>
</tr>
<tr>
<td>BIOL 3730</td>
<td>Human Physiology</td>
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</tbody>
</table>
### Minor in Chemistry

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
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</thead>
<tbody>
<tr>
<td>BIOL 4829</td>
<td>Microbial Physiology</td>
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</tr>
<tr>
<td>BIOL 4836 &amp; 4836L</td>
<td>Cell Biology: Molecular Mechanisms and Cell Biology: Molecular Mechanisms Laboratory</td>
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</tr>
<tr>
<td>BIOL 4837</td>
<td>Cell Biology: Protein Biology Laboratory</td>
<td></td>
</tr>
<tr>
<td>BIOL 4890</td>
<td>Molecular Genetics</td>
<td></td>
</tr>
<tr>
<td>BIOL 4890L</td>
<td>Molecular Genetics Laboratory</td>
<td></td>
</tr>
<tr>
<td>BIOL 5840</td>
<td>Advanced Microbiology</td>
<td></td>
</tr>
<tr>
<td>PHLT 3709</td>
<td>Elements of Urban Environmental Health Practices</td>
<td></td>
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<tr>
<td>PHLT 3725</td>
<td>Topics in Public Health</td>
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</tr>
<tr>
<td>BIOL 4829</td>
<td>Microbiology and Microbiology Laboratory</td>
<td></td>
</tr>
<tr>
<td>BIOL 4836 &amp; 4836L</td>
<td>Cell Biology: Molecular Mechanisms and Cell Biology: Molecular Mechanisms Laboratory</td>
<td></td>
</tr>
<tr>
<td>BIOL 4837</td>
<td>Cell Biology: Protein Biology Laboratory</td>
<td></td>
</tr>
<tr>
<td>BIOL 4890</td>
<td>Molecular Genetics</td>
<td></td>
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<tr>
<td>BIOL 4890L</td>
<td>Molecular Genetics Laboratory</td>
<td></td>
</tr>
<tr>
<td>BIOL 5840</td>
<td>Advanced Microbiology</td>
<td></td>
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<tr>
<td>BIOL 4890</td>
<td>Microbiology and Microbiology Laboratory</td>
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<tr>
<td>BIOL 4890L</td>
<td>Molecular Genetics Laboratory</td>
<td></td>
</tr>
<tr>
<td>BIOL 5840</td>
<td>Advanced Microbiology</td>
<td></td>
</tr>
</tbody>
</table>

### Other Required Courses:

- BIOL 3702 Microbiology and Microbiology Laboratory (4)
- BIOL 3702L Microbiology Laboratory (0)

### Semester Hours

- Year 1
  - Summer: 120 S.H.
  - Second Summer Session:
    - BIOL 2603 Integrated Biology for BS/MD (4)
    - PSYC 1560 General Psychology (3)
    - Semester Hours: 7
  - Fall:
    - YSU 1500 Success Seminar (1)
    - CHEM 1515 General Chemistry 1 (4)
    - CHEM 1515L General Chemistry 1 Laboratory (0)
    - CHEM 1515R Recitation for General Chemistry 1 or Calculus 1 (1)
    - MATH 1571 Calculus 1 (4)
    - ENGL 1550 Writing 1 (3)
    - Semester Hours: 11
  - Spring:
    - CHEM 3719 Organic Chemistry 1 (4)
    - CHEM 3719L Organic Chemistry 1 Laboratory (0)
    - CHEM 3719R Organic Chemistry Recitation 1 (1)
    - PHLT 1531 Fundamentals of Public Health (3)
    - Semester Hours: 12
  - Select two of the following: 6-9
    - CHEM 2604 Quantitative Analysis
    - CHEM 2604L Quantitative Analysis Laboratory
    - CHEM 3720 Organic Chemistry 2
    - CHEM 3720L Organic Chemistry 2 Laboratory
    - CHEM 3729 Inorganic Chemistry
    - CHEM 3739 Physical Chemistry 1
    - CHEM 3739L Physical Chemistry 1 Laboratory
    - CHEM 3764 Chemical Toxicology
    - CHEM 3785 Biochemistry 1

- Year 2
  - Summer:
    - First Summer Session:
      - CHEM 3719 Organic Chemistry 1 (4)
      - CHEM 3719L Organic Chemistry 1 Laboratory (0)
      - PHLT 1531 Fundamentals of Public Health (3)
    - Second Summer Session:
      - CHEM 3720 Organic Chemistry 2 (4)
      - CHEM 3720L Organic Chemistry 2 Laboratory (0)
      - CHEM 3720R Organic Chemistry Recitation 2 (1)
      - SOC 3745 Sociology of Health, Illness, and Healthcare (3)
    - Semester Hours: 16
  - Fall:
    - CHEM 3785 Biochemistry 1 (3)
    - CHEM 3785L Biochemistry Laboratory (1)
    - PHYS 2610 General Physics 1 (4)
    - PHYS 2610L General Physics Laboratory 1 (1)
    - BIOL 3721 Genetics (3)
    - Semester Hours: 15
  - Spring:
    - CHEM 3764 Chemical Toxicology (3)
    - CHEM 3785 Biochemistry 1 (3)
    - CHEM 3785L Biochemistry Laboratory (1)
    - PHYS 2610L General Physics Laboratory 1 (1)
    - BIOL 3721 Genetics (3)
    - Semester Hours: 14
  - Total Semester Hours: 118

- Total Semester Hours: 120-122
Forensic Science is an interdisciplinary major. Courses that are required for, at least a 2.5 GPA in order to remain in the FS program: following coursework within their first 3 semesters at YSU, and must maintain increased flexibility in upper-division coursework. Students must complete the multi-disciplinary, and allows for fewer electives in lower level courses but an A Bachelor of Science in Applied Science degree in Forensic Science requires a preparation beyond the undergraduate level. Students should be prepared to pursue advanced degrees within their discipline.

Admission Policy
Students wishing to transfer into the forensic science program must have and maintain a cumulative GPA of at least 2.5. Note: individuals with a felony, drug, and/or domestic violence conviction will experience difficulty gaining employment in the fields of forensic science and/or criminal justice. Students with misdemeanor convictions or juvenile sex offense convictions should seek advice from an advisor.

Internships
YSU's Forensic Science program requires a six-semester hour internship experience which will provide students with the opportunity to integrate academic studies with the daily operations of a forensic science related facility. Each semester hour requires approximately 45 on-site hours. Internships also foster the development of networking relationships with practitioners who can assist in procuring future employment. Certain criminal convictions may prohibit students from being eligible for an internship.

For more information, visit the Forensic Science Program. (http://catalog.ysu.edu/undergraduate/colleges-programs/college-health-human-services/department-criminal-justice-forensic-sciences/bas-forensic-science/)

A Bachelor of Science in Applied Science degree in Forensic Science requires a minimum of 121 semester hours. The program is designed to be rigorous and multi-disciplinary, and allows for fewer electives in lower level courses but an increased flexibility in upper-division coursework. Students must complete the following coursework within their first 3 semesters at YSU, and must maintain at least a 2.5 GPA in order to remain in the FS program:

- HAHS 1500- Introduction to BCHHS
- ENGL 1550- Writing I
- CRJS 1500- Introduction to Criminal Justice
- FSCI 1510- Survey of Forensic Science
- CHEM 1515- General Chemistry I
- CHEM 1515L- General Chemistry I Laboratory
- Two MATH courses, which may include MATH 1510, MATH 1510C, MATH 1511, MATH 1511C, MATH 1571, MATH 1572

A minor is intended to contrast with or deepen a major or General Education. Forensic Science is an interdisciplinary major. Courses that are required for, and count toward, the Forensic Science major cannot be counted toward a minor.

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
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</thead>
<tbody>
<tr>
<td>YSU 1500 or SS 1500 or HONR 1500</td>
<td>Success Seminar</td>
<td>1-2</td>
</tr>
<tr>
<td>ENGL 1550 or ENGL 1549</td>
<td>Writing 1 with Support</td>
<td>3-4</td>
</tr>
<tr>
<td>ENGL 1551</td>
<td>Writing 2</td>
<td>3</td>
</tr>
<tr>
<td>CMST 1545</td>
<td>Communication Foundations</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1571</td>
<td>Calculus 1 (required for major)</td>
<td>4</td>
</tr>
<tr>
<td>Social and Personal Awareness (2 courses)</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Natural Science (2 courses; 1 with lab) met with BIOL 2601 and 2602</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>BIOL 2601 &amp; 2601L</td>
<td>General Biology: Molecules and Cells and General Biology: Molecules and Cells Laboratory (required for major)</td>
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<tr>
<td>BIOL 2602 &amp; 2602L</td>
<td>General Biology: Organisms and Ecology and General Biology: Organisms and Ecology Laboratory (required for major)</td>
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</tr>
<tr>
<td>CRJS 1500</td>
<td>Introduction to Criminal Justice</td>
<td>3</td>
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<tr>
<td>ANTH 1500</td>
<td>Introduction to Anthropology (required for major)</td>
<td>3</td>
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<tr>
<td>Chemistry</td>
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<td></td>
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<tr>
<td>CHEM 1515 &amp; 1515L</td>
<td>General Chemistry 1 and General Chemistry 1 Laboratory</td>
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<tr>
<td>CHEM 1516 &amp; 1516L</td>
<td>General Chemistry 2 and General Chemistry 2 Laboratory</td>
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<tr>
<td>CHEM 3719 &amp; 3719L</td>
<td>Organic Chemistry 1 and Organic Chemistry 1 Laboratory</td>
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<tr>
<td>CHEM 3720 &amp; 3720L</td>
<td>Organic Chemistry 2 and Organic Chemistry 2 Laboratory</td>
<td>4</td>
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<tr>
<td>CHEM 2604 &amp; 2604L</td>
<td>Quantitative Analysis and Quantitative Analysis Laboratory</td>
<td>5</td>
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<td>Additional Biology</td>
<td>3</td>
<td></td>
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<tr>
<td>BIOL 3721</td>
<td>Genetics</td>
<td>3</td>
</tr>
<tr>
<td>Physics</td>
<td>5</td>
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<tr>
<td>PHYS 2610 &amp; 2610L</td>
<td>General Physics 1 and General Physics Laboratory 1</td>
<td>5</td>
</tr>
<tr>
<td>PHYS 2611 &amp; 2611L</td>
<td>General Physics 2 and General Physics Laboratory 2</td>
<td>5</td>
</tr>
<tr>
<td>Mathematics &amp; Statistics</td>
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<tr>
<td>STAT 3717</td>
<td>Statistical Methods</td>
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<tr>
<td>MATH 1572</td>
<td>Calculus 2</td>
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<tr>
<td>Criminal Justice and Forensic Sciences</td>
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<tr>
<td>FSCI 1510</td>
<td>Survey of Forensic Sciences</td>
<td>3</td>
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<tr>
<td>CRJS 2602</td>
<td>Criminal Courts</td>
<td>3</td>
</tr>
<tr>
<td>FSCI 3714</td>
<td>Forensic Science: Crime Scene Investigation</td>
<td>2</td>
</tr>
<tr>
<td>FSCI 3716</td>
<td>Forensic Science Evidence Analysis</td>
<td>2</td>
</tr>
<tr>
<td>FSCI 3700</td>
<td>Forensic Fire and Explosive Investigation</td>
<td>3</td>
</tr>
<tr>
<td>FSCI 4850</td>
<td>Special Topics in Forensic Sciences</td>
<td>3</td>
</tr>
<tr>
<td>CRJS 4807</td>
<td>Criminal Justice Internship</td>
<td>3-12</td>
</tr>
<tr>
<td>FSCI 5814</td>
<td>Practice and Ethics in Forensic Science</td>
<td>3</td>
</tr>
<tr>
<td>Concentrations (Pick One -Biology, Chemistry or Anthropology)</td>
<td>13-16</td>
<td></td>
</tr>
</tbody>
</table>
### Bachelor of Science in Applied Science in Forensic Science

#### CHEMISTRY (Select at least 13 s.h.)
- **CHEM 3729** Inorganic Chemistry
- **CHEM 3739** Physical Chemistry 1 & **3739L** and Physical Chemistry 1 Laboratory
- **CHEM 3740** Physical Chemistry 2 & **3740L** and Physical Chemistry 2 Laboratory
- **CHEM 3764** Chemical Toxicology
- **CHEM 3785** Biochemistry 1 & **3785L** and Biochemistry Laboratory
- **CHEM 3786** Biochemistry 2
- **CHEM 4891** Special Topics
- **CHEM 5804** Chemical Instrumentation & **5804L** and Chemical Instrumentation Laboratory
- **CHEM 5821** Intermediate Organic Chemistry
- **CHEM 5822** Advanced Organic Laboratory & **5822L** and Advanced Organic Laboratory

### BIOLOGY (Select at least 13 s.h.)
- **BIOL 3702** Microbiology & **3702L** and Microbiology Laboratory
- **BIOL 3703** Clinical Immunology & **3703L** and Clinical Immunology Laboratory
- **BIOL 3705** Introduction to Human Gross Anatomy & **3705L** and Introduction to Human Gross Anatomy Laboratory
- **BIOL 3711** Cell Biology: Fine Structure
- **BIOL 3716** Molecular Microbiology 1: Nucleic Acids
- **BIOL 3730** Human Physiology & **3730L** and Human Physiology Laboratory
- **BIOL 4800** Bioinformatics & **4800L** and Bioinformatics Laboratory
- **BIOL 4839** Selected Topics in Physiology
- **CHEM 3785** Biochemistry 1 & **3785L** and Biochemistry Laboratory
- **CHEM 3786** Biochemistry 2
- **BIOL 4850** Problems in Biology

### ANTHROPOLOGY (Select at least 16 s.h.)
- **ANTH 2600** Human Osteology
- **ANTH 3702** Archaeology
- **ANTH 3703** Biological Anthropology
- **ANTH 3778** Archaeological Techniques
- **ANTH 3779** Fieldwork in Historical and Industrial Sites
- **ANTH 3780** Forensic Anthropology 1
- **ANTH 4800** Undergraduate Research
- **ANTH 4881** Forensic Anthropology 2
- **ANTH 4883** Case Studies in Forensic Anthropology
- **ANTH 4891** Advanced Topics in Biological Anthropology
- **BIOL 3705** Introduction to Human Gross Anatomy & **3705L** and Introduction to Human Gross Anatomy Laboratory
- **GEOG 5812** Global Positioning Systems and GIScience

### Electives to meet 120 hours

#### Optional courses (not a track)
- **BIOL 4890** Molecular Genetics & **4890L** and Molecular Genetics Laboratory
- **BIOL 5827** Gene Manipulation
- **FSCI 4850** Special Topics in Forensic Sciences
- **CHEM 3719R** Organic Chemistry Recitation 1
- **CHEM 3720R** Organic Chemistry Recitation 2
- **PHLT 3731** Drug Use and Abuse
- **PHLT 5810** Agents of Mass Casualty
- **PHLT 5812** Crisis Management in Public Health

### Total Semester Hours
121-135

There may be other courses that qualify for upper division electives, but you must discuss these options with an academic advisor and get pre-approved.

#### Year 1

##### Fall
- **YSU 1500** Success Seminar
- **ENGL 1550** Writing 1 or **ENGL 1549** Writing 1 with Support
- **FSCI 1510** Survey of Forensic Sciences
- **CRJS 1500** Introduction to Criminal Justice
- **CHEM 1515** General Chemistry 1 & **1515L** and General Chemistry 1 Laboratory
- **BIOL 3702** Microbiology & **3702L** and Microbiology Laboratory
- **BIOL 3716** Molecular Microbiology 1: Nucleic Acids
- **BIOL 3730** Human Physiology & **3730L** and Human Physiology Laboratory
- **BIOL 4800** Bioinformatics & **4800L** and Bioinformatics Laboratory
- **BIOL 4839** Selected Topics in Physiology
- **CHEM 3785** Biochemistry 1 & **3785L** and Biochemistry Laboratory
- **CHEM 3786** Biochemistry 2
- **BIOL 4850** Problems in Biology

### Semester Hours
17-18

#### Spring
- **ENGL 1551** Writing 2
- **CRJS 2602** Criminal Courts
- **ANTH 1500** Introduction to Anthropology
- **CHEM 1516** General Chemistry 2 & **1516L** and General Chemistry 2 Laboratory
- **BIOL 3702** Microbiology & **3702L** and Microbiology Laboratory
- **BIOL 3716** Molecular Microbiology 1: Nucleic Acids
- **BIOL 3730** Human Physiology & **3730L** and Human Physiology Laboratory
- **BIOL 4800** Bioinformatics & **4800L** and Bioinformatics Laboratory
- **BIOL 4839** Selected Topics in Physiology
- **CHEM 3785** Biochemistry 1 & **3785L** and Biochemistry Laboratory
- **CHEM 3786** Biochemistry 2
- **BIOL 4850** Problems in Biology

### Semester Hours
16

#### Year 2

##### Fall
- **CMST 1545** Communication Foundations
- **FSCI 3714** Forensic Science: Crime Scene Investigation
- **FSCI 3714L** Forensic Science: Crime Scene Investigation Lab
- **MATH 1571** Calculus 1
- **CHEM 3719** Organic Chemistry 1 & **3719L** and Organic Chemistry 1 Laboratory

### Semester Hours
14

#### Spring
- **FSCI 3700** Forensic Fire and Explosive Investigation
- **FSCI 3716** Forensic Science Evidence Analysis
- **FSCI 3716L** Forensic Science Evidence Analysis Laboratory
- **MATH 1572** Calculus 2
- **CHEM 3720** Organic Chemistry 2 & **3720L** and Organic Chemistry 2 Laboratory

### Semester Hours
14

#### Year 3

##### Fall
- **BIOL 2601** General Biology: Molecules and Cells & **2601L** and General Biology: Molecules and Cells Laboratory
- **FSCI 4850** Special Topics in Forensic Sciences
- **STAT 3717** Statistical Methods
- **Elective 3700-Level**

### Semester Hours
16

#### Spring
- **BIOL 2602** General Biology: Organisms and Ecology & **2602L** and General Biology: Organisms and Ecology Laboratory
- **CHEM 2604** Quantitative Analysis & **2604L** and Quantitative Analysis Laboratory

### Total Semester Hours
121-135
Learning Outcomes

1. Students will demonstrate knowledge on the influence of the CJ system at the subsystem levels (policing, courts, and corrections).
2. Students can analyze scientific situations, and apply the scientific method within the CJ judicial system.
3. Students can explain biology principles and how they relate to forensic science.
4. Students can explain chemistry principles and how they relate to forensic science.
5. Students can explain basic physics and math principles, and how they relate to forensic science.

FSCI 1510 Survey of Forensic Sciences 3 s.h.
Overview of history, evolution, and current status. Discussion of training, education, certification, accreditation, and legal issues. Designed to be accessible to students without a science background and provide an introduction to forensic science for those considering further studies.

FSCI 3700 Forensic Fire and Explosive Investigation 3 s.h.
Principles of fire science including fire detection, suppression, and investigation of both fire and explosion scenes. Special emphasis on concepts of fire progression, cause and origin determinations, arson investigation, and bombings.
Prereq.: CRJS 1500 or FSCI 1510.

FSCI 3714 Forensic Science: Crime Scene Investigation 2 s.h.
An introduction to the legal and practical aspects of crime scene investigation. Emphasis on the value of physical evidence and the skills and tools needed to recognize, collect and preserve physical evidence found at a crime scene.
Prereq.: FSCI 1510 and sophomore standing.
Concurrent with: FSCI 3714L.

FSCI 3714L Forensic Science: Crime Scene Investigation Lab 1 s.h.
Laboratory section designed to teach the practical skills employed by criminalists collecting evidence at a crime scene. Students will gain experience using tools, techniques and procedures required to recognize and collect evidence by completing practical exercises.
Prereq.: FSCI 1510 and sophomore standing.
Concurrent with: FSCI 3714.

FSCI 3716 Forensic Science Evidence Analysis 2 s.h.
Serves as an introduction to the techniques, instrumentation and procedures used in the examination and analysis of physical evidence in a forensic laboratory setting and the legal aspects regarding the use of laboratory reports in the investigation process.
Prereq.: FSCI 3714, FSCI 3714L.
Concurrent with: FSCI 3716L.

FSCI 3716L Forensic Science Evidence Analysis Laboratory 1 s.h.
Laboratory section designed to familiarize students with instrumentation that is commonly used in the examination and analysis of physical evidence. Students will gain experience with the tools, techniques and procedures used for examining physical evidence through practical exercises.
Prereq.: FSCI 3714, FSCI 3714L.
Concurrent with: FSCI 3716.

FSCI 4850 Special Topics in Forensic Sciences 3 s.h.
Contemporary issues in criminal justice. Topics are announced prior to enrollment.
Prereq.: Senior standing or permission of instructor.

FSCI 4850C Special Topics in Criminal Justice Death Investigation 3 s.h.
Contemporary issues in criminal justice. Topics are announced prior to enrollment.
Prereq.: Senior standing or permission of instructor.

Forensic Science Certificate

The Forensic Sciences Certificate is an 18 hour program that emphasizes crime scene investigation and basic information regarding the use of forensic work within multiple career fields. The student can pick their own advanced courses based upon their desired career.

Upon completion of the Forensic Science Certificate, the student will be able to:

- Describe various subfields of forensic science, and identify where forensic sciences fit into the Criminal Justice system in investigation process.
- Examine crime scenes, recover evidence, and perform basic scientific tests within a laboratory setting.
- Apply biological, chemical, mathematical, and physics theory towards solving crimes.
- Evaluate the probative value of forensic evidence such as hair examination, drug analysis, and fire investigation.
focuses in mechanical and additive manufacturing engineering. Within the mechanical engineering program students can also earn certifications in specific areas.
• The Power Plant (Electrical Utilities) Technology offers an Associate in Technical Studies with a focus in basic operating of electrical utility power plants and related industries.

Welcome from the Chair
As the chair, I want to welcome you to YSU and the School of Computer Science, Information, and Engineering Technology. The programs within the School offers students the most current curriculum with the technology that will prepare them for their professional careers upon graduation by teaching them to apply knowledge and training to create solutions.

Students in the various programs have the opportunity to work with faculty on both research and real-world projects, as well as internship and co-op opportunities so that they gain experience in their field of study.

I am proud of the faculty, students, and graduates of our programs. We look forward to meeting you and answering any questions you may have! Please feel free to contact me at cmclamb@ysu.edu.

School Contact Information
Phone: (330) 941-3134 or (330) 941-3287
Locations:
• Computer Science and Information Technology: Meshel Hall, Room 339
• Engineering Technology: Moser Hall, Room 4120

Program Coordinators
Computer Science: Dr. Kramer rwkramer@ysu.edu
Information Technology: Dr. Arslanyilmaz aarslanyilmaz@ysu.edu
Civil and Construction Engr’g Tech: Prof. Korenic rjkorenic@ysu.edu
Electrical Engr’g. Tech: Prof. Zapka jazapka@ysu.edu
Mechanical Engr Tech: Dr. Lamb cmclamb@ysu.edu
Power Plant Tech: Prof. Coyne dpcoyne@ysu.edu

Computer Science and Information Systems

Computer Science, Information Technology, and Computer Information Technology

• The Computer Science program is offered as the Bachelor of Science degree and is a traditional, analytical program which involves extensive computer programming and support courses in mathematics.
• The Information Technology program is also offered as the Associate of Applied Science and the Bachelor of Science in Applied Science. Coursework emphasizes applying high-end computer applications and system management.
• The Master’s in Computing and Information Systems offers advanced education in several computing areas.
• The Civil and Construction Engineering Technology is offered as both Associate and Bachelor of Science in Applied Science degree and focuses on civil design engineering and the construction aspect to civil engineering.
• The Electrical Engineering Technology is also offered as both Associate and Bachelor of Science in Applied Science degrees with focuses in electrical engineering design and industrial automation.
• The Mechanical Engineering Technology program, also offers both Associate and Bachelor of Science in Applied Science degrees with
Students must meet the degree requirement of each program. The curricular requirements for each program is listed below. For more information, please see the program coordinator/department chair.

- BS in Computer Science (p. 457)
- AAS in Information Technology (p. 451)
- BSAS in Information Technology (p. 455)

ADVISING AND ADVISOR LIST

Advising, which is a continuous and consistent collaborative process between faculty members and students, is to make sure that students are making the right decision in the growth and development process, while seeking a degree. The role of academic advisor is to help students in developing efficient and effective educational plans that are inline with the life goals. Therefore, advisors are to:

- help students (advisees) to adapt the planning nature of the academic life and expectations, which is consistent with their abilities and interests.
- meet with students once a semester to for academic planning
- monitor and mentor the student progress towards the educational goals
- make sure rules and regulations are well understood by the students and the necessary steps are taken in the correct order
- approve all designated educational transactions (registration, advising, course transfer, major selection, graduation requirements, etc.)

Professor
Abdurrahman Arslanyilmaz, Ph.D., Associate Professor
Robert W. Kramer, Ph.D., Associate Professor
Alina Lazar, Ph.D., Professor
Kriss A. Schueller, Ph.D., Professor
John R. Sullins, Ph.D., Associate Professor
Feng Yu, Ph.D., Associate Professor
Yong Zhang, Ph.D., Associate Professor

Lecturer
Robert Gilliland, M.C.I.S., Lecturer

Majors
- BS in Computer Science (p. 456)
- AAS in Computer Information Systems (p. 450)
- BSAS in Computer Information Systems (p. 453)
- AAS in Information Technology (p. 451)
- BSAS in Information Technology (p. 454)

Minors
- Minor in Computer Databases (p. 458)
- Minor in Computer Networking (p. 458)
- Minor in Electronic Commerce Technology (p. 458)
- Minor in Information Systems Programming (p. 459)
- Minor in Integrated Technologies (p. 459)
- Minor in Multimedia and Web Design (p. 459)
- Minor in Object-Oriented Programming (p. 459)
Minor in Computer Science (p. 458)
Minor in Security – Requirements will be posted soon.
Minor in Tech Support– Requirements will be posted soon.
Minor in Web Communication (http://catalog.ysu.edu/undergraduate/colleges-programs/college-liberal-arts-social-sciences-education/department-english/minor-web-communications/)

Computer Information Systems

CIS 3714 Assembly Language and Architecture 3 s.h.
Fundamentals of computer architecture and organization. Forms of data representation. Assembly language and machine language programming. The assembly process. Methods and protocols for subroutine linkage.
Prereq.: CSIS 2605 or CSIS 2610.

CIS 3718 Operating Systems Concepts 3 s.h.
Concepts of computer operating systems, including memory allocation, job scheduling, process communication, and input/output processing. Examinations of operating systems on several platforms.
Prereq.: CSIS 2605 or CSIS 2610.

CIS 3735 UNIX Environment 3 s.h.
Use of the UNIX operating system or similar systems, including file management utilities, editors, compilers, and communication utilities. A comprehensive examination of programming in various shells such as Bourne, C, and Korn.
Prereq.: CSIS 2605 or CSIS 2610.

CIS 4840 Business System Analysis and Design 4 s.h.
Development of communication and written skills for the analysis and design of business systems. Utilization of project management techniques for design, development, and maintenance of a departmental level system.
Prereq.: CIS 3722, CIS 3723, and 3 additional s.h. of upper-division departmental courses.
Gen Ed: Capstone.

Computer Science and Information Systems

CSIS 1500 Computer Literacy 3 s.h.
A survey of computer concepts and applications. Network access and electronic mail. Emphasis on software applications packages available for microcomputers, including word processing. This course is meant for students with minimal or no background in computers. Credit will not be given for both CSIS 1500 and for either CSIS 1514, CSIS 1525, or CSIS 1590.

CSIS 1514 Business Computer Systems 3 s.h.
Hands-on business software, with emphasis on operating systems, word processing, database and spreadsheet applications. This course is not designed for beginning computer users. Beginning computer users should take CSIS 1500: Computer Literacy before taking this course.

CSIS 1525 Survey of Modern Operating Systems 3 s.h.
This course presents the history of design and creation of the operating system, role and purpose of the operating system, functionality of a typical operating system, mechanisms to support client-server models, handheld devices, design issues (efficiency, robustness, flexibility, portability, security, compatibility). Influences of security, networking, multimedia, windowing systems. This course will introduce the Android, IOS, Linux, Windows, and Unix operating systems. This course is not applicable to the CSCI major. This course is not designed for beginning computer users. Beginning computer users should take CSIS 1500: Computer Literacy before taking this course.

CSIS 1550 Survey of Language Topics 3 s.h.
Introductory language course with emphasis on writing structured programs in a particular computer language. The language topic and special prerequisites are announced in advance. Not applicable to the CIS or CSCI major.
Prereq.: Permission of chair.

CSIS 1560 Basic Programming 3 s.h.
An introduction to computer programming using a visual object-oriented programming tool. Topics include control structures, loops, functions, methods, recursion, array processing, and events. Students will learn to design and implement virtual worlds.

CSIS 1570 Web Systems and Technologies 3 s.h.
Concepts of web-based applications including related software, interfaces and digital media. Foundations of web-site development including design, implementation, and integration. Multimedia integration and security and accessibility issues.
Prereq.: MATH 1505 or MATH 1507 or Math Placement Level 35.

CSIS 1590 Survey of Computer Science and Information Systems 3 s.h.
Concepts, theory, and contemporary issues underlying the computing sciences. Introduction to computer applications, the YSU computing environment, the use of communication and information networks, and basic problem solving techniques using computers. This course is not designed for beginning computer users. Beginning computer users should take CSIS 1514: Business Computer Systems before taking this course.
Prereq.: or concurrent MATH 1505 or MATH 1507 or at least Level 30 on the Mathematics Placement Test.

CSIS 1595 Fundamentals of Programming and Problem-Solving 1 3 s.h.
Introduction to concepts, principles, and skills of programming using a high-level programming language. Topics include programming language characteristics, an integrated development environment, algorithms and pseudocode, variables, operators, conditional statements, loops, break statements, functions, arrays, testing, debugging, documentation and program style. Two hours lecture and two hours lab. Credit will not be given for both CSIS 1595 and CSIS 2610.
Prereq.: CSIS 1590 or MATH 1507 or Level 40 on Math Placement Test.

CSIS 2602 Programming in C 3 s.h.
Programming concepts and techniques, with emphasis on scientific and engineering applications. An accelerated survey of the C programming language and an introduction to the UNIX programming environment. Not applicable to the CIS or CSCI major.
Prereq.: CSIS 1500 and MATH 1513 or Math Placement Level 5 or 50 or higher.

CSIS 2605 Fundamentals of Programming and Problem-Solving 2 3 s.h.
Theory and application of programming principles, data and information structures, simple linked lists, searching, and sorting, software development life cycle. Practice using these concepts in an object-oriented programming language. Credit will not be given for both CSIS 2605 and CSIS 2610. Prereq. or.
Prereq.: C or better in CSIS 1595.
Coreq.: MATH 1511 or MATH 1513 or MATH 1552 or Level 50 on Math Placement Test.

CSIS 2610 Programming and Problem-Solving 4 s.h.
Problem solving methods and algorithms using a high-level programming language. Designing, coding, debugging, and documenting programs using techniques of good programming style. Three hours lecture, two hours lab. Credit will not be given for both CSIS 2605 and CSIS 2610.
Prereq.: MATH 1511 or MATH 1513 or MATH 1552 or Level 50 on Math Placement Test.

CSIS 2615 Information Structures for Information Technology 3 s.h.
Study and application of information structure concepts such as lists, trees, multilevel lists, files, and data-method integration. Practice using these concepts in a 3D animation environment using an object-oriented programming language in the background. Emphasis on algorithm design, object utilization, and storyboarding.
Prereq.: CSIS 1590, and either CSIS 2605 or CSIS 2610.
CSIS 2620  System Configuration and Maintenance  3 s.h.
Theory and practice of installing and maintaining hardware and software for complex systems. Motherboards, memories, storage devices, processors, power supplies, network interface cards, and I/O peripheral devices. Operating systems, startup and boot process, I/O peripheral devices, data backup, data protection and recovery, networking, security strategies, virtualization, and troubleshooting.
Prereq.: CSIS 1590 or CSIS 2605 or CSIS 2610.

CSIS 2655  Personal Cyber Security  3 s.h.
PC system security including data assurance, standards and legal issues, and methods and procedures for guarding against potential software attack. Not applicable to the CIS, CSCS, or INFO major. Credit will not be given for 2655 if a student already received credit for CSIS 3755 or its equivalent.

CSIS 2660  Foundations of Electronic Commerce  3 s.h.
Framework of electronic commerce, including e-commerce architecture, infrastructure, technologies, tools, and strategies. Topics include security, environmental, and implementation issues. Includes web site analysis, hardware/software issues, mini-cases, and introduction to site development.
Prereq.: CSIS 1590.

CSIS 2699  Computer Science and Information Systems Internship 1-3 s.h.
Classroom theory applied to on-the-job professional experience related to the student's major. Work for a minimum of 12 hours per week at an approved site, complete a related project, and attend seminars. May be repeated once with the permission of the coordinator.
Prereq.: Sophomore in good standing and permission of internship coordinator.

CSIS 3700  Data Structures and Objects  4 s.h.
Program design, style and expression, testing and debugging for larger programs. Introductory concepts of object oriented programming, including classes, methods, encapsulation, and abstract data types. Theory and application of data structures, including linked structures, trees, networks, and graphs.
Prereq.: "C" or better in either CSIS 2605 or CSIS 2610.

CSIS 3701  Advanced Object-oriented Programming  3 s.h.
Object-oriented design and programming, including classes, encapsulation, inheritance, polymorphism, exception handling, and generics. Design, development, and testing of large-scale programs using object-oriented programming.
Prereq.: "C" or better in either CSIS 2605 or CSIS 2610.

CSIS 3722  Development of Databases  3 s.h.
This course covers concepts about data modelling, relational data model, Structured Query Language (SQL), relational database design and transaction processing. Storing, retrieving, updating, and displaying data using Structured Query Language (SQL), functions and triggers. Secure operations performed by database administrators.
Prereq.: CSIS 1590 or CSIS 2605 or CSIS 2610.

CSIS 3723  Networking Concepts and Administration  3 s.h.
Overview of electronic communications concepts and technologies, with emphasis on Local Area Networks. Network topologies, design, administration, installed applications, and performance monitoring. Privacy, ethical and legal concerns.
Prereq.: CSIS 2605 or CSIS 2610.

CSIS 3726  Visual/Object-Oriented Programming  4 s.h.
Use of one or more visual programming languages in conjunction with the concepts of object-oriented programming. Development of interactive programs using a graphical user interface. Database and Internet programming. Three hours lecture, two hours lab.
Prereq.: CSIS 2605 or CSIS 2610.

CSIS 3730  Computer Graphics  3 s.h.
Techniques of computer raster graphics, including scan conversion, two- and three-dimensional clipping and windowing, transformations, and viewing in 3D. Algorithms and more advanced topics.
Prereq.: CSIS 3700 and MATH 1572.

CSIS 3731  Human-Computer Interaction  3 s.h.
Concepts of human-computer interaction, including human factors, performance analysis, cognitive processing, usability studies, environment, training, user and task analysis, ergonomics, and accessibility standards.
Prereq.: CSIS 2605 or CSIS 2610 or INFO 2663.

CSIS 3732  Intranet Database Implementation  3 s.h.
Design and implementation of 3NF PC-based databases uploaded to intranet Web sites. Remote database design, development, and updating using SQL within an application development software package. Validating database integrity. Includes site development and projects.
Prereq.: CSIS 3722 and either CSIS 2605 or CSIS 2610.

CSIS 3737  Game Programming  3 s.h.
Programming and development of computer games using a game programming environment. Software tools for coding 2D and 3D graphics and animation, sprites and other assets, and handling input events, motion, and collisions. Object-oriented programming and AI concepts for game development.
Prereq.: CSIS 1595 or CSIS 2610.

CSIS 3738  Graphics and Animation for Gaming  3 s.h.
Design and implementation of animated characters in 3D computer games. Mesh design creation; surface materials, textures, and lighting; skeletal and facial rigging; motion and animation. Underlying physical principles and realistic character design concepts. Use of 3D animation software.
Prereq.: CSIS 1595 or CSIS 2610.

CSIS 3740  Computer Organization  4 s.h.
Basic hardware components, structure, and implementation of computer systems. Assembly language and instruction set architecture. Combinational and sequential digital logic, CPU and control unit design.
Prereq.: CSIS 2605 or CSIS 2610.

CSIS 3755  Information Assurance  3 s.h.
Confidentiality, integrity, and authenticity of information. Methods of controlling access to electronic data, enforcing security policies, protecting against malicious attacks (including web site attacks), intrusion detection, and disaster recovery.
Prereq.: CSIS 1590 or CSIS 2605 or CSIS 2610.

CSIS 3756  Security Design  3 s.h.
Operating system security concepts, techniques and applications including MS Windows and LINUX/UNIX platforms. Includes a hands-on design project.
Prereq.: Either CSCI 5806 or CSIS 3755 and either CSIS 1525 or CSIS 3718.

CSIS 3757  Computer Forensics  3 s.h.
Professional computer forensics, including methods and investigative techniques for the discovery and recovery of digital images and information at all levels, from PCs to large information systems. Chain of evidence and investigative techniques for cybercrime detection.
Prereq.: CSIS 3755.

CSIS 3760  Electronic Commerce Programming  3 s.h.
Programming for client/server systems related to electronic commerce, including server-side languages such as Perl and Client-side languages such as JavaScript. Topics include form validation and parsing, database access and manipulation, and design, networking, and security issues.
Prereq.: CSIS 2605 or CSIS 2610.

CSIS 3761  Electronic Commerce Strategies  3 s.h.
Advanced concepts for development and maintenance of electronic commerce web sites. Topics include e-commerce paradigms, software and programming, and infrastructure issues. Site design, evaluation, deployment, and administration issues, including prototyping and SDLC issues. Building web-based training components. Includes IT project.
Prereq.: CSIS 2660 and INFO 2663.
CSIS 3737  Artificial Intelligence  3 s.h.

Artificial intelligence techniques for designing and programming intelligent non-player characters for a variety of different types of game genres. Finite and fuzzy state machines, terrain analysis and path planning, board games, language understanding, and learning.

Prereq.: CSIS 3700 or CSIS 3736 or CSCI 6901.

CSIS 5837  Artificial Intelligence in Game Design  3 s.h.

Artificial intelligence techniques for designing and programming intelligent non-player characters for a variety of different types of game genres. Finite and fuzzy state machines, terrain analysis and path planning, board games, language understanding, and learning.

Prereq.: CSIS 3700 or CSIS 3736 or CSCI 6901.

CSIS 5828  Computer Network Security  3 s.h.

Overview of security issues that arise from computer networks, including the spectrum of security activities, methods, methodologies, and procedures. Intrusion detection, firewalls, threats and vulnerabilities, denial of service attacks, viruses and worms, encryption, and forensics.

Prereq.: CSIS 3723 or equivalent.

CSIS 5827  Artificial Intelligence  3 s.h.

Overview of artificial intelligence software related to decision making. Topics may include robotic control, expert systems, automated knowledge acquisition, or logic programming.

Prereq.: CSIS 3700 and 3 s.h. of upper-division departmental courses, or CSIS 6901.

CSIS 5838  Graphics and Animation for Gaming  3 s.h.

Design and implementation of 3D computer games. Development of 3D characters, including surface creation and effects, skeletal and facial rigging, and motion and animation. Programming those characters in a 3D game engine, including scripting, level and game design, and game physics.

Prereq.: CSIS 3726.

CSIS 5882  Database Applications  3 s.h.

Design and development of applications using database languages.

Prereq.: CSIS 3722.

CSIS 4831  Virtual Reality Systems  3 s.h.

An investigation into the use, design, implementation, and evaluation of virtual reality interfaces. Experiences with VR systems using both 2D projections and stereoscopic display and other systems. Students work in multidisciplinary groups.

Prereq.: CSIS 3730.

CSIS 4870  Web Communications Capstone  3 s.h.

A project course requiring the integration of website development tools and techniques, database development, effective writing for the web, and audience analysis, to produce a website of substantial depth and breadth. Oral and written presentations of final project.

Prereq.: Senior standing and permission of instructor.

Gen Ed: Capstone.

CSIS 4878  Mobile Application Development  3 s.h.

Principles of designing and developing cross-platform mobile applications. Techniques for designing, developing, testing, packaging, and publishing cross-platform mobile apps. Client- and server-side programming theories and practices regarding mobile app development.

Prereq.: CSIS 3722, INFO 3776, and CSIS 3701.

CSIS 4893  Computer Science and Information Systems Advanced Internship  2-4 s.h.

An industrial/academic experience in information systems/technology. Employment for 15 to 20 hours per week. May be repeated once with the permission of internship supervisor.

Prereq.: 16 s.h. of department courses (at least 3 hours upper-division) and permission of department internship supervisor.

CSIS 5824  Applied Artificial Intelligence  3 s.h.

Overview of artificial intelligence software related to decision making. Topics may include robotic control, expert systems, automated knowledge acquisition, or logic programming.

Prereq.: CSIS 3700 and 3 s.h. of upper-division departmental courses, or CSIS 6901.

CSIS 5828  Computer Network Security  3 s.h.

Overview of security issues that arise from computer networks, including the spectrum of security activities, methods, methodologies, and procedures. Intrusion detection, firewalls, threats and vulnerabilities, denial of service attacks, viruses and worms, encryption, and forensics.

Prereq.: CSIS 3723 or equivalent.

CSIS 5837  Artificial Intelligence in Game Design  3 s.h.

Artificial intelligence techniques for designing and programming intelligent non-player characters for a variety of different types of game genres. Finite and fuzzy state machines, terrain analysis and path planning, board games, language understanding, and learning.

Prereq.: CSIS 3700 or CSIS 3726 or CSCI 6901.

CSIS 5838  Graphics and Animation for Gaming  3 s.h.

Design and implementation of 3D computer games. Development of 3D characters, including surface creation and effects, skeletal and facial rigging, and motion and animation. Programming those characters in a 3D game engine, including scripting, level and game design, and game physics.

Prereq.: CSIS 3727.

CSIS 5883  Remote Access and Multilayer Switched Networks  4 s.h.

Advanced WAN connectivity, including Frame Relay, ATM, ISDN, DSL, and modems; IP address scaling techniques; advanced access control; core issues in network design and management, focusing on multilayer switched networks and emerging multi-service networks. Will incorporate CCNP Cisco Academy curriculum. Three hours lecture, three hours lab.

Prereq.: CSIS 3783.

CSIS 5884  Building Scalable Networks and Advanced Internetwork Troubleshooting  4 s.h.

Designing scalable networks; advanced routing protocols; VLSM and route aggregation; management and diagnostic tools; troubleshooting tools and methodology for TCP/IP, Novell, and AppleTalk connectivity, VLANs, routers, and switches; Frame Relay and ISDN connectivity. Will incorporate CCNP Cisco Academy curriculum. Three hours lecture, three hours lab.

Prereq.: CSIS 3783.

Computer Science

CSCI 3710  Introduction to Discrete Structures  3 s.h.

Basic set theory, including functions and relations. Boolean algebra, propositional logic, regular expressions, and finite automata.

Prereq.: CSIS 2610 and MATH 1571 or MATH 1585H, or Math Placement Level 9 or 90.

CSCI 3750  Advanced UNIX and C Programming  3 s.h.

Use of UNIX programming environment and associated tools and utilities. Command language programming. Systems programming with ANSI C. May include UNIX internals and system administration.

Prereq.: CSIS 3700.
CSCI 3770  Concepts of Programming Languages  3 s.h.
Comparative survey of programming language paradigms, including
imperative, object-oriented, event-driven, functional, logic-based, and
concurren programming languages. Design and tradeoffs of programming
language features and implementation, including syntax, control structures,
types, memory management, and security.
Prereq.: CSCI 3701.

CSCI 3780  Microcomputer System Software  3 s.h.
Programming microprocessor based systems using assembly language. Study of
addressing techniques, machine language, program segmentation, and
linking on microcomputers.
Prereq.: CSCI 3700.

CSCI 4805  System Programming  3 s.h.
Topics selected from aspects of systems programming, including assemblers,
loaders, linkage editors, macro processors, and file management.
Prereq.: CSCI 3700 and either CSCI 3710 or CSCI 3740.

CSCI 4830  Advanced Computer Graphics  3 s.h.
A thorough investigation of graphics algorithms. Topics include hidden surface
removal, parametric curves, lighting, shading, and texturing. Implementation of
a graphics project required.
Prereq.: CSCI 3730 and MATH 3720.

CSCI 4862  Server-Side Web Development and Programming  3 s.h.
Configuration of web server software and the use of server-side programming.
Server-side scripting. Database access and drivers. Security issues, including
access control and secured transmissions.
Prereq.: CSCI 3700 or CSCI 3701.

CSCI 4890  Computer Projects  2-4 s.h.
Individualized study of a topic in computer science culminating in a written report
and an oral presentation. May be repeated up to 8 s.h. of upper-
division CSCI courses applicable to the minimum requirements of a computer
science major, and formal project proposal.
Prereq.: 24 s.h. of computer science (including at least 3 s.
Gen Ed: Capstone.

CSCI 5801  Software Engineering  3 s.h.
Developing and maintaining complex software systems. Process and life-cycle
models, and tools for software development (such as CASE). Specification
methods, prototyping, validation and verification strategies, and version
maintenance. Management of the system development process. A group
project is required.
Prereq.: CSCI 3701.

CSCI 5802  Software Tools and Practices  3 s.h.
A course that focuses on the different tools and techniques that software
engineers typically use while developing software. Topics include current
software engineering tools and practices, software testing, software
architecture, version control systems, build and make systems, debuggers,
dynamic analysis tools, static analysis tools, and design patterns. Students gain
experience in multiple environments (Windows and a UNIX-based
environment).
Prereq.: Junior standing and CSCI 3700 or CSCI 6901.

CSCI 5806  Operating Systems  3 s.h.
Study of the various components of operating systems including kernels and
monitors, currency and parallel processing, processor management, storage
management, device management, I/O processing and file management.
Prereq.: CSCI 3700 and CSCI 3740.

CSCI 5807  Compiler Design  3 s.h.
Study of compiler design and construction, including context-free languages,
lexical analysis, parsing, code generation and optimization.
Prereq.: CSCI 3700 and CSCI 3740, CSCI 3710.

CSCI 5814  Computer Architecture  3 s.h.
Study of high-performance sequential computer architecture. Topics include
performance evaluation, instruction set design, processor implementation
techniques, pipelining, vector processing, memory hierarchy design, and
parallel architecture.
Prereq.: CSCI 3700 and CSCI 3740.

CSCI 5820  Simulation  3 s.h.
Methods for modeling discrete event systems by algorithmic approaches
using simulation languages.
Prereq.: CSIS 3700 and STAT 3743.

CSCI 5822  Database Design and Information Retrieval  3 s.h.
Study of physical database storage, relational and object data modeling,
logical database design (normalization process), and structural query
languages.
Prereq.: CSCI 3700 and CSCI 3710.

CSCI 5823  Communication Networks  3 s.h.
Study of network structures and topologies, international standards, models,
communication media and protocols, hardware and software.
Prereq.: CSCI 3700 and either CSCI 3723 or CSCI 3740.

CSCI 5835  Artificial Intelligence  3 s.h.
Study of the theory and applications of intelligent systems. Topics may include
general problem-solving techniques, knowledge representation and expert
systems, vision and perception, and natural language processing. AI systems
and languages.
Prereq.: CSCI 3700 or CSCI 3701.

CSCI 5840  Automata Theory  3 s.h.
Abstract models of computers, and the languages they generate or recognize.
Finite state automata and regular expressions; Context-free grammars and
pushdown automata; Turing machines. Limits of each model, including
decidability and undecidability of computing-related problems. Applications of
these models to areas such as input validation, security, language design, and
compilers.
Prereq.: CSCI 3710.

CSCI 5857  Encoding and Encryption  3 s.h.
Securing computer and information systems through encoding and/or
encryption. Private and public cryptographic methods, digital certificates and
signatures, cryptovariable techniques, key management, and database security
issues.
Prereq.: CSIS 2605 or CSIS 2610; MATH 1513 or MATH 1552 or Math
Placement Test of 4 or 40 or higher; and at least 3 s.h. of upper-division
departmental courses.

CSCI 5860  Programming Language Structures  3 s.h.
Systematic approach to the study of the structures of programming
languages. Formal descriptions, syntax, semantics and technical
characteristics.
Prereq.: CSCI 3701 and CSCI 3710.

CSCI 5870  Data Structures and Algorithms  3 s.h.
Study and application of analysis and design techniques to nonnumerical
algorithms. Topics selected from algorithms acting on sets, trees, graphs,
memory management; notions of complexity and related areas.
Prereq.: CSCI 3700 and CSCI 3710.

CSCI 5881  Microcomputer System Architecture  3 s.h.
State-of-the-art course on microcomputer architecture. Topics include
introduction to microcomputer systems, 16 and 32 bit microprocessors,
direct memory access and other I/O transfer schemes, architecture of I/O
processors, introduction to computer communications.
Prereq.: CSCI 3740 and CSCI 3790.

CSCI 5895  Special Topics  2-4 s.h.
A study of special topics in computer science. Subject matter and credit
hours will be announced in advance. May be repeated multiple times if topic is
different.
Prereq.: At least 3 s.h. of upper-division departmental courses, and permission
of chair.
Information Technology

INFO 1575 Document Preparation 4 s.h.
Preparation of documents using information processing and standard and advanced electronic productivity tools such as templates, tables, columns, forms macros, graphics, and merging. Integration of documents with other software. Creating and maintaining hypertext documents. 
Prereq.: Knowledge of word processing or ENGL 1550.

INFO 2600 Concepts of Information Technologies 3 s.h.
The foundation and general principles behind information technology, including data representation, encoding systems, encryption methods, database fundamentals, logic for programming, basic data analysis, and graph applications in networking.

INFO 2663 Information Technology Management 3 s.h.
Principles and practices of effective information systems management. Includes organization environment, leadership issues, information system types, strategic role of information technology, planning issues, managing and supporting essential technologies, system development and computing, and successful integration of people and technology.
Prereq.: CSIS 1590 or INFO 2600.

INFO 2698 Special Topics 1-3 s.h.
An in-depth study of information technologies. Topics vary. May be repeated for different topics. 
Prereq.: Permission of chairperson.

INFO 3704 Business Communication 3 s.h.
Prereq.: ENGL 1551.

INFO 3714 Advanced Spreadsheets 3 s.h.
Includes macros, look-up tables, advanced problems, templates, and projects with emphasis on accounting and finance applications. 
Prereq.: CSIS 1514 or CSIS 1590.

INFO 3774 Multimedia Technology 4 s.h.
Technical configurations, graphic creation, manipulation, exchange, and digital asset management. Web and multimedia audio and video. Video strategies on the Internet. Fundamental Web utility tools. Storyboarding strategies, layout, and design issues. Three hours lecture, two hours lab. 
Prereq.: CSIS 1590.

INFO 3775 Multimedia Authoring 4 s.h.
A study of multimedia authoring tools. Methods for integrating text, graphics, sound, and video. Project required. Three hours lecture and two hours lab. 
Prereq.: INFO 3774.

INFO 3776 Client-Side Scripting Techniques 4 s.h.
Scripting and the role of scripting languages in software development for the web, and identifying key scripting languages used for the web. Developing, debugging, and testing scripts for the web, and local and remote software version control systems. Three hours lecture and two hours lab. 
Prereq.: CSIS 1570, and CSIS 2605 or CSIS 2610.

INFO 3777 Computer Technology for Digital Image Processing 4 s.h.
Study of tools and technology for digital image processing. Creating and capturing still and video images for use in Web site development. Techniques used in compression and archiving of graphics files. Project required. Three hours lecture and two hours lab. 
Prereq.: INFO 3774.

INFO 3787 Training and Employee Development 3 s.h.
Theory and practice of designing training programs. Analyzing training needs, selecting instructional strategies, and implementing and evaluating training programs.
Prereq.: INFO 3774 or both INFO 1575 and CSIS 1590.

INFO 3790 Integrated Information Systems 3 s.h.
Students organize and operate an information center utilizing decision-making skills, and information systems procedures and components. Lab time required. 
Prereq.: INFO 3714 or CSIS 3723.

INFO 4880 Information Technology Analysis and Design 3 s.h.
Information systems integration and modeling. Analysis of dynamic information flow, functional requirements, and system design in theory and practice. 
Prereq.: CSIS 3722 and either CSIS 3723 or CSIS 3782. 
Gen Ed: Capstone.

INFO 4895 Special Topics 2-4 s.h.
A study of special topics in information technologies. Subject matter and credit hours will be announced in advance. May be repeated multiple times if topic is different. 
Prereq.: At least 3 s.h. of upper-division departmental courses and permission of chair.

INFO 5875 Advanced Multimedia Authoring 4 s.h.
Advanced study of multimedia authoring tools. Analysis of commercial applications. Group project required. Three hours lecture and two hours lab. 
Prereq.: INFO 3775.

Associate of Applied Science in Computer Information Systems

The computer information systems program offers students the flexibility of earning either a two-year AAS degree or continuing for an additional two years to obtain a four-year BSAS degree through the two-plus-two program.

This discipline covers both the technical and end-user aspects of computing, using PCs through mainframe computers with hands-on experience.

Student skills are developed in computation that includes:

- application programming
- networking and telecommunications
- database design
- cyber security
- analysis of complex business and technical environments

CIS graduates of the AAS degree program will continue their studies towards a bachelor’s degree in a computer or information technology area or obtain employment as programmers, computer specialists, and in other closely related fields.

CIS graduates of the BSAS degree program will obtain full-time employment as programmers, network administrators, systems analysts, computer specialists, and in other closely related fields.

Associate Degree Program

The computer information systems associate degree program emphasizes the use of computers to solve business or science problems. The graduate may be employed in positions involving direct use of microcomputers and mainframe computers for business or science administration and decision support applications. This degree may be earned in four semesters if students average 16 hours per semester.

Students wishing to receive the Associate of Applied Science in computer information systems must complete the following:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
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<tbody>
<tr>
<td>YSU 1500</td>
<td>Success Seminar</td>
<td>1-2</td>
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<tr>
<td>or SS 1500</td>
<td>Strong Start Success Seminar</td>
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</table>
### General Education Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 1549</td>
<td>Writing 1 with Support</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 1551</td>
<td>Writing 2</td>
<td>3</td>
</tr>
<tr>
<td>CMST 1545</td>
<td>Communication Foundations</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1570</td>
<td>Applied Calculus 1</td>
<td>4</td>
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<tr>
<td></td>
<td>2 Gen Ed courses from two of the three areas: NS (one must have a lab), AH, or SS</td>
<td>6</td>
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### Major Requirements

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<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSIS 1590</td>
<td>Survey of Computer Science and Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>CSIS 1595</td>
<td>Fundamentals of Programming and Problem Solving 1</td>
<td>3</td>
</tr>
<tr>
<td>CSIS 2605</td>
<td>Fundamentals of Programming and Problem Solving 2</td>
<td>3</td>
</tr>
<tr>
<td>CSIS 3722</td>
<td>Development of Databases</td>
<td>3</td>
</tr>
<tr>
<td>CSIS 3723</td>
<td>Networking Concepts and Administration</td>
<td>3</td>
</tr>
<tr>
<td>CSIS 3726</td>
<td>Visual/Object-Oriented Programming</td>
<td>4</td>
</tr>
<tr>
<td>CSIS 3760</td>
<td>Electronic Commerce Programming</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 2602</td>
<td>Financial Accounting</td>
<td>3</td>
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<tr>
<td>ACCT 2603</td>
<td>Managerial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 3743</td>
<td>Professional and Technical Writing</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 2619</td>
<td>Introduction to Logic</td>
<td>3</td>
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### Support Courses

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<tbody>
<tr>
<td>ACCT 2602</td>
<td>Financial Accounting</td>
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<td>Professional and Technical Writing</td>
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<td>Introduction to Logic</td>
<td>3</td>
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</table>

### Electives

Select at least 5-6 additional semester hours of upper division CIS electives. 6-7

### Total Semester Hours

| Total Semester Hours | 60-63 |

### Learning Outcomes

1. The Associates program in Computer Information Systems provides preparation for students to develop problem-solving techniques to aid in the design, coding, debugging and documentation of high-level programming languages.

2. The Associates program in Computer Information Systems provides preparation for students to understand the basic structure, design, development, implementation, and modification of databases for use in management of information systems.

3. The Associates program in Computer Information Systems provides preparation for students to understand network topologies and the design, administration, and performance monitoring of computer networks and network applications.

4. The Associates program in Computer Information Systems provides preparation for students to use visual/object-oriented programming languages to develop interactive, database and internet programs.

5. The Associates program in Computer Information Systems provides preparation for students to write programs for client/server systems related to electronic commerce using server-side languages such as Perl and client-side languages such as JavaScript.

### Associate of Applied Science in Information Technology

Information technology provides systematic foundations that include methodologies and models for conceptualizing the complex dynamics of the Information Technology environment as it applies to information systems design and implementation.

IT professionals possess the right combination of knowledge and practical, hands-on expertise to take care of both an organization’s information technology infrastructure and the people who use it. They assume responsibility for selecting hardware and software products appropriate for an organization. They integrate those products with organizational needs and infrastructure and install, customize and maintain those applications, thereby providing a secure and effective environment that supports the activities of the organization’s computer users. In IT programming often involves writing short programs that typically connect existing components (scripting).

Planning and managing an organization’s IT infrastructure is a difficult and complex job that requires a solid foundation in applied computing as well as management and people skills. Those in the IT discipline require special skills – in understanding, for example, how networked systems are composed and structured, and what their strengths and weaknesses are. There are important software systems concerns such as reliability, security, usability, and effectiveness and efficiency for their intended purpose; all of these concerns are vital. These topics are difficult and intellectually demanding.

The program supports work processes and employee performance enhancements; is designed to improve overall workgroup and individual productivity; and addresses the creation, distribution, storage, and use of information in all its states. Business processes are incorporated as an integral part of all course content. Information Technology encompasses:

- Client/Server Side Computing
- Project Management
- Multimedia
• Networks
• Database Systems
• System Analysis
• Information Security
• Network/ Cybersecurity
• Application Development
• E-Commerce Programming

IT graduates of the AAS degree program may continue their studies towards a bachelor’s degree in a computer or information technology area or may obtain full-time employment as web technicians, help desk support, network technicians, and in other closely related fields.

IT graduates of the BSAS degree program may obtain full-time employment as web designers, network administrators, multimedia developers, application developers, database managers, and in other closely related fields.

**Associate Degree Program**

Graduates of the associate degree program can pursue careers in service and support of information systems, as well as continuing on to a bachelor’s degree in information technology. This degree may be earned in four semesters if students average 15-16 hours per semester.

Students wishing to receive the Associate of Applied Science in information technology must complete the following:

<table>
<thead>
<tr>
<th>COURSE</th>
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<td>or HONR 1500</td>
<td>Intro to Honors</td>
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</tr>
<tr>
<td><strong>General Education Requirements</strong></td>
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<tr>
<td>ENGL 1550</td>
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<td>3</td>
</tr>
<tr>
<td>CMST 1545</td>
<td>Communication Foundations</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1552</td>
<td>Applied Mathematics for Management</td>
<td>4</td>
</tr>
<tr>
<td>Select 2 courses from 2 of the domains: AH, SS, or NS (one must include a lab)</td>
<td>6</td>
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<tr>
<td><strong>Major Requirements</strong></td>
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<tr>
<td>CSIS 1525</td>
<td>Survey of Modern Operating Systems</td>
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<tr>
<td>CSIS 1570</td>
<td>Web Systems and Technologies</td>
<td>3</td>
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<tr>
<td>CSIS 1590</td>
<td>Survey of Computer Science and Information Systems</td>
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</tr>
<tr>
<td>CSIS 1595</td>
<td>Fundamentals of Programming and Problem- Solving 1</td>
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</tr>
<tr>
<td>CSIS 2605</td>
<td>Fundamentals of Programming and Problem- Solving 2</td>
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<tr>
<td>INFO 2663</td>
<td>Information Technology Management</td>
<td>3</td>
</tr>
<tr>
<td>INFO 3704</td>
<td>Business Communication</td>
<td>3</td>
</tr>
<tr>
<td>or ENGL 3743</td>
<td>Professional and Technical Writing</td>
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</tr>
<tr>
<td>CSIS 3722</td>
<td>Development of Databases</td>
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<tr>
<td>CSIS 3723</td>
<td>Networking Concepts and Administration</td>
<td>3</td>
</tr>
<tr>
<td>or CSIS 3782</td>
<td>or Cisco Networking Academy 1</td>
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</tr>
<tr>
<td>CSIS 3731</td>
<td>Human-Computer Interaction</td>
<td>3</td>
</tr>
<tr>
<td>CSIS 3755</td>
<td>Information Assurance</td>
<td>3</td>
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<tr>
<td><strong>Additional Course Work to total 60 s.h.</strong></td>
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<tr>
<td>Free Electives</td>
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<td><strong>Total Semester Hours</strong></td>
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**Year 1**

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<tbody>
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<tr>
<td>ENGL 1550</td>
<td>Writing 1</td>
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<tr>
<td>CSIS 1590</td>
<td>Survey of Computer Science and Information Systems</td>
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<tr>
<td>CSIS 1595</td>
<td>Fundamentals of Programming and Problem- Solving 1</td>
</tr>
<tr>
<td>CMST 1545</td>
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<tr>
<td>MATH 1552</td>
<td>Applied Mathematics for Management</td>
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| Semester Hours | 17 |

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<td>ENGL 1551</td>
<td>Writing 2</td>
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<td>CSIS 1525</td>
<td>Survey of Modern Operating Systems</td>
</tr>
<tr>
<td>CSIS 1570</td>
<td>Web Systems and Technologies</td>
</tr>
<tr>
<td>CSIS 2605</td>
<td>Fundamentals of Programming and Problem- Solving 2</td>
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| General Ed Course | 3 |

| Semester Hours | 15 |

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<td>Development of Databases</td>
</tr>
<tr>
<td>CSIS 3723</td>
<td>Networking Concepts and Administration</td>
</tr>
<tr>
<td>or CSIS 3782</td>
<td>or Cisco Networking Academy 1</td>
</tr>
<tr>
<td>CSIS 3731</td>
<td>Human-Computer Interaction</td>
</tr>
<tr>
<td>INFO 2663</td>
<td>Information Technology Management</td>
</tr>
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<td>Free Elective</td>
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| Semester Hours | 14 |

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<tbody>
<tr>
<td>CSIS 3755</td>
<td>Information Assurance</td>
</tr>
<tr>
<td>INFO 3704</td>
<td>Business Communication</td>
</tr>
<tr>
<td>or ENGL 3743</td>
<td>or Professional and Technical Writing</td>
</tr>
<tr>
<td>General Education Course</td>
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</tr>
<tr>
<td>Free Elective</td>
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</tr>
<tr>
<td>Free Elective</td>
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</tr>
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</table>

| Semester Hours | 15 |

| Total Semester Hours | 61 |

**Learning Outcomes**

1. The Associate program in Information Technology provides preparation for student's basic knowledge of technologies in the implementation and troubleshooting of networks.
2. The Associate program in Information Technology provides preparation for student's basic knowledge of technologies in designing databases and extracting information using appropriate programs or applications.
3. The Associate program in Information Technology provides preparation for student's basic knowledge of technologies in assessing information management processes and procedures and the application of technologies.
4. The Associate program in Information Technology provides preparation for student's basic knowledge of technologies in developing interactive programs.
## Bachelor of Science in Applied Science in Computer Information Systems

**Bachelor's Degree Program**

The computer information systems professional will develop his or her ability to conceptualize, design, and implement high-quality information systems based upon computer systems ranging from a single-user system to complex, interactive, and multi-user distributed systems. This degree may be earned in eight semesters if students average 15-16 hours per semester.

### Curriculum Sheet

Students wishing to receive a Bachelor of Applied Science in Computer Information Systems must complete the following:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>YSU 1500</td>
<td>Success Seminar</td>
<td>1-2</td>
</tr>
<tr>
<td>or SS 1500</td>
<td>Strong Start Success Seminar</td>
<td></td>
</tr>
<tr>
<td>or HONR 1500</td>
<td>Intro to Honors</td>
<td></td>
</tr>
</tbody>
</table>

### General Education Requirements

| ENGL 1550 | Writing 1 | 3-4 |
| or ENGL 1549 | Writing 1 with Support | |
| ENGL 1551 | Writing 2 | 3 |
| CMST 1545 | Communication Foundations | 3 |

Mathematics Requirement (met through MATH in major) Included in Support Courses

| Arts and Humanities (6 s.h.) | |
| PHIL 2625 | Introduction to Professional Ethics (credits applied in major) | 3 |
| One additional Arts and Humanities course | 3 |
| Natural Sciences (2 courses, 1 with lab) (6-7 s.h.) | 7 |
| Social Science (6 s.h.) | 6 |
| Social and Personal Awareness (6 s.h.) | 6 |

### Major Requirements

| CSIS 1590 | Survey of Computer Science and Information Systems | 3 |
| CSIS 1595 | Fundamentals of Programming and Problem-Solving 1 | 3 |
| CSIS 2605 | Fundamentals of Programming and Problem-Solving 2 | 3 |
| CSIS 3722 | Development of Databases | 3 |
| CSIS 3723 | Networking Concepts and Administration | 3 |
| CSIS 3726 | Visual/Object-Oriented Programming | 4 |
| CSIS 3760 | Electronic Commerce Programming | 3 |
| CIS 4840 | Business System Analysis and Design | 4 |

Select at least 21 additional semester hours from CSIS 1525, 2620, or Upper Division electives 21

Support Courses

| ACCT 2602 | Financial Accounting | 3 |
| ACCT 2603 | Managerial Accounting | 3 |
| STAT 3717 | Statistical Methods | 4 |
| MATH 1570 | Applied Calculus 1 | 4 |
| ENGL 3743 | Professional and Technical Writing | 3 |
| PHIL 2619 | Introduction to Logic | 3 |

Minor 18

Select at least 18 semester hours. Some Gen Ed courses may be included in the minor

### Total Semester Hours

120-122

### Four Year Plan

<copy the table>

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Fall</th>
<th>S.H.</th>
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</thead>
<tbody>
<tr>
<td>YSU 1500</td>
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</tr>
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<td>CSIS 1590</td>
<td>Survey of Computer Science and Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>CSIS 1595</td>
<td>Fundamentals of Programming and Problem-Solving 1</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 1550</td>
<td>Writing 1</td>
<td>3-4</td>
</tr>
<tr>
<td>or ENGL 1549</td>
<td>Writing 1 with Support</td>
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</tr>
<tr>
<td>MATH 1570</td>
<td>Applied Calculus 1</td>
<td>4</td>
</tr>
<tr>
<td>GER Natural Science</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

| Semester Hours | 17-18 |

| Spring | |
| CSIS 2605 | Fundamentals of Programming and Problem-Solving 2 | 3 |
| ENGL 1551 | Writing 2 | 3 |
| CMST 1545 | Communication Foundations | 3 |
| PHIL 2619 | Introduction to Logic | 3 |
| GER Social Science | 3 |

| Semester Hours | 15 |

| Year 2 | Fall | |
| CSIS 3722 | Development of Databases | 3 |
| CSIS 3723 | Networking Concepts and Administration | 3 |
| CSIS/CSIS Upper Division Elective | 3 |
| Minor course | 3 |
| ACCT 2602 | Financial Accounting | 3 |

| Semester Hours | 15 |

| Spring | |
| CSIS 3726 | Visual/Object-Oriented Programming | 4 |
| CSIS 3760 | Electronic Commerce Programming | 3 |
| Minor course | 3 |
| ACCT 2603 | Managerial Accounting | 3 |
| ENGL 3743 | Professional and Technical Writing | 3 |

| Semester Hours | 16 |

| Year 3 | Fall | |
| CSIS/CSIS Upper Division Elective | 3 |
| PHIL 2625 | Introduction to Professional Ethics (AH) | 3 |
| STAT 3717 | Statistical Methods | 4 |
| Minor course | 3 |
The Bachelor of Science in Applied Science in Information Technology provides preparation for students:

- to develop problem-solving techniques to the design, coding, debugging and documentation of high-level programming languages.
- to analyze the basic structure, design, development, implementation, and modification of databases for use in information systems.
- to analyze network topologies and the design, administration, and performance monitoring of computer networks and network applications.
- to use visual/object-oriented programming languages to develop interactive, database and internet programs.
- to write programs for client/server web systems related to electronic commerce using server-side languages such as Perl and client-side languages such as JavaScript.
- to demonstrate oral communication skills for the analysis, design, development, and maintenance of business systems.
- to demonstrate written communication skills for the analysis, design, development, and maintenance of business systems.

### Learning Outcomes

1. The Bachelor of Science in Applied Science in Information Technology provides preparation for students to develop problem-solving techniques to aid in the design, coding, debugging and documentation of high-level programming languages.
2. The Bachelor of Science in Applied Science in Information Technology provides preparation for students to analyze the basic structure, design, development, implementation, and modification of databases for use in management of information systems.
3. The Bachelor of Science in Applied Science in Information Technology provides preparation for students to analyze network topologies and the design, administration, and performance monitoring of computer networks and network applications.
4. The Bachelor of Science in Applied Science in Information Technology provides preparation for students to use visual/object-oriented programming languages to develop interactive, database and internet programs.
5. The Bachelor of Science in Applied Science in Information Technology provides preparation for students to write programs for client/server web systems related to electronic commerce using server-side languages such as Perl and client-side languages such as JavaScript.
6. The Bachelor of Science in Applied Science in Information Technology provides preparation for students to demonstrate oral communication skills for the analysis, design, development and maintenance of business systems.
7. The Bachelor of Science in Applied Science in Information Technology provides preparation for students to demonstrate written communication skills for the analysis, design, development and maintenance of business systems.

## Bachelor of Science in Applied Science in Information Technology

Information technology provides systematic foundations that include methodologies and models for conceptualizing the complex dynamics of the Information Technology environment as it applies to information systems design and implementation.

IT professionals possess the right combination of knowledge and practical, hands-on expertise to take care of both an organization's information technology infrastructure and the people who use it. They assume responsibility for selecting hardware and software products appropriate for an organization. They integrate those products with organizational needs and infrastructure and install, customize and maintain those applications, thereby providing a secure and effective environment that supports the activities of the organization's computer users. In IT, programming often involves writing short programs that typically connect existing components (scripting).

Planning and managing an organization's IT infrastructure is a difficult and complex job that requires a solid foundation in applied computing as well as management and people skills. Those in the IT discipline require special skills – in understanding, for example, how networked systems are composed and structured, and what their strengths and weaknesses are. There are important software systems concerns such as reliability, security, usability, and effectiveness and efficiency for their intended purpose; all of these concerns are vital. These topics are difficult and intellectually demanding.

The program supports work processes and employee performance enhancements; is designed to improve overall workplace and individual productivity; and addresses the creation, distribution, storage, and use of information in all its states. Business processes are incorporated as an integral part of all course content. Information Technology encompasses:

- Client/Server Side Computing
- Project Management
- Multimedia
- Networks
- Database Systems
- System Analysis
- Information Security
- Network/ Cybersecurity
- Application Development
- E-Commerce Programming

IT graduates of the AAS degree program may continue their studies towards a bachelor's degree in a computer or information technology area or may obtain full-time employment as web technicians, help desk support, network technicians, and in other closely related fields.

IT graduates of the BSAS degree program may obtain full-time employment as web designers, network administrators, multimedia developers, application developers, database managers, and in other closely related fields.

<table>
<thead>
<tr>
<th>Semester Hours</th>
<th>Total Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
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<td>123-124</td>
</tr>
<tr>
<td>13</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Bachelor's Degree Program**

The information technology professional will develop his or her ability to conceptualize, design, and implement high-quality information systems based upon computer systems ranging from single-user systems to complex, interactive, and multi-user distributed systems.

IT majors will choose to follow one of several concentration areas:

- Database
- E-commerce Programming
- Multimedia/Web Design
- Networking
- Security
- Software Development

This degree may be earned in eight semesters if students average 16 hours per semester.

Students wishing to receive the Bachelor of Applied Science in information technology must complete the following:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
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<tr>
<td><strong>FIRST YEAR REQUIREMENT - STUDENT SUCCESS</strong></td>
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<td>Success Seminar</td>
<td>1-2</td>
</tr>
<tr>
<td>ENGL 1550 or ENGL 1549</td>
<td>Writing 1 or Writing 1 with Support</td>
<td>3-4</td>
</tr>
<tr>
<td>CMST 1545</td>
<td>Communication Foundations</td>
<td>3</td>
</tr>
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</table>

**General Education Requirements**

- Met through MATH support course in major
- Arts and Humanities (6 s.h.)
- PHIL 2625 Introduction to Professional Ethics | 3 |
- One additional Arts and Humanities course | |
- Natural Sciences (2 courses, 1 with lab) (6-7 s.h.) | 7 |
- Social Science (6 s.h.) | 6 |
- Social and Personal Awareness (6 s.h.) | 6 |

**Major Requirements**

- CSIS 1525 Survey of Modern Operating Systems | 3 |
- CSIS 1570 Web Systems and Technologies | 3 |
- CSIS 1590 Survey of Computer Science and Information Systems | 3 |
- CSIS 1595 Fundamentals of Programming and Problem-Solving | 3 |

- CSIS 2605 Fundamentals of Programming and Problem-Solving 2 | 3 |
- CSIS 3722 Development of Databases | 3 |
- CSIS 3723 Networking Concepts and Administration or CSIS 3782 Cisco Networking Academy 1 | 3 |
- CSIS 3731 Human-Computer Interaction | 3 |
- CSIS 3755 Information Assurance | 3 |
- INFO 2663 Information Technology Management | 3 |
- INFO 4880 Information Technology Analysis and Design | 3 |

**Concentration area**

- Database Concentration
  - CSIS 3726 Visual/Object-Oriented Programming
  - CSIS 4822 Database Applications
  - INFO 3714 Advanced Spreadsheets
- E-Commerce Concentration
  - CSIS 3760 Electronic Commerce Programming
  - INFO 3776 Client-Side Scripting Techniques
  - INFO 3777 Computer Technology for Digital Image Processing
  - INFO 5875 Advanced Multimedia Authoring
- Networking Concentration
  - CSIS 2620 System Configuration and Maintenance
  - CSIS 3783 Cisco Networking Academy 2
  - CSIS 4823 Data Communications Networking
  - CSIS 5883 Remote Access and Multilayer Switched Networks
  - CSIS 5884 Building Scalable Networks and Advanced Internetwork Troubleshooting
- Security Concentration
  - CSIS 2620 System Configuration and Maintenance
  - CSIS 3756 Security Design
  - CSIS 3757 Computer Forensics
  - CSCI 5857 Encoding and Encryption
  - CSCI 5895 Special Topics
- Application Development Concentration
  - CSIS 3700 Data Structures and Objects
  - CSIS 3701 Advanced Object-oriented Programming
  - CSIS 3726 Visual/Object-Oriented Programming
  - CSIS 3760 Electronic Commerce Programming
  - CSIS 4878 Mobile Application Development
  - CSCI 5801 Software Engineering
- Departmental Electives
  - Select at least 6 additional semester hours of upper division Information Technology or CSIS courses. CSCI or CSCI courses numbered 3000 and above may also be used as electives with advisor approval. | 6 |

**Support Courses**

- STAT 2601 Introductory Statistics | 3 |
- MATH 1552 Applied Mathematics for Management | 4 |
- INFO 3704 Business Communication or ENGL 3743 Professional and Technical Writing | 3 |

**Minor**

Select at least 18 s.h. from an unspecified minor. | 18 |

**Free Electives** Any courses to meet 120 total hours | 9 |

**Total Semester Hours** 120-122

**Year 1**

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<tr>
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<tr>
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<td>CSIS 1590</td>
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<tr>
<td>CSIS 1595</td>
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<td>Survey of Modern Operating Systems</td>
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Bachelor of Science in Computer Science

<table>
<thead>
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<tr>
<td>STAT 2601</td>
<td>Introductory Statistics</td>
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<td>Semester Hours</td>
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<td>CSIS 3755</td>
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<td>INFO/CSIS UD Elective</td>
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<tr>
<td>GER Social &amp; Personal Awareness</td>
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<td>GER Arts &amp; Humanities</td>
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<td>IT Concentration</td>
<td>Semester Hours</td>
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<table>
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<tr>
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<th>Semester Hours</th>
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</thead>
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<tr>
<td>IT Concentration</td>
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<tr>
<td>PHIL 2625</td>
<td>Introduction to Professional Ethics</td>
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<td>Free elective</td>
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<tr>
<td>Minor Course</td>
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<tr>
<td>GER Social Science</td>
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<td>Request a Graduation Evaluation after completing 80-85 s.h. from the STEM Advising Center, 2325 Moser Hall, (330) 941-2512.</td>
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<tr>
<td>Minor Course</td>
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<tr>
<td>Free Elective</td>
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<tr>
<td>IT Concentration</td>
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<tr>
<td>INFO/CSIS UD elective</td>
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<tr>
<td>Minor Course</td>
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<td>GER NS</td>
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<td>Free Elective</td>
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<tr>
<td>IT Concentration</td>
<td>Semester Hours</td>
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<table>
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<th>Semester Hours</th>
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<tbody>
<tr>
<td>INFO 4880</td>
<td>Information Technology Analysis and Design</td>
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<tr>
<td>GER NS, AH, SS, or SPA</td>
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</tr>
<tr>
<td>IT Concentration</td>
<td>Semester Hours</td>
</tr>
</tbody>
</table>

| Total Semester Hours | 119-120 |

Learning Outcomes:

The Bachelor program in Information Technology provides preparation and instruction that enables students:

1. to analyze computing technology related problems, identify and define computing technology requirements to address these problems
2. to design, implement, and evaluate computing technologies to meet the needs of organizations or individuals using current techniques, skills, and tools
3. to communicate with clients effectively while understanding their needs and identifying appropriate solutions
4. to work collaboratively within a team environment to achieve its goal(s)
5. to understand the need and importance of continuous professional development
6. to recognize the technical and legal issues involved with technologies and concepts used in information technology
7. to offer solutions and perform required tasks in networking design, implementation, and administration; information assurance and security; database design, development, and administration; interactive program design and development; e-commerce design, development, and implementation; and report and document preparation.

Bachelor of Science in Computer Science

Computer Science spans the range from theory through programming to cutting-edge development of computing solutions. Computer Science offers a foundation that permits graduates to adapt to new technologies and new ideas. The work of computer scientists falls into three categories:
the Bachelor of Science in computer science must complete the second minor. This degree may be earned in eight semesters if students average 15 hours per semester.

The flexibility of the program allows the student many choices including a second minor. This degree may be earned in eight semesters if students average 15 hours per semester.

The benefits of Computer Science bachelor’s degree include:

- The median annual salary of $100,690 for software developers*
- 17% projected job growth for software developers through 2024*

The advantages of pursuing a Computer Science bachelor’s degree at YSU include:

- Multiple terms throughout the year help you to start anytime to complete your degree.
- Full-time faculty accessibility at any time
- Full-time faculty coverage of core courses
- One of the lowest tuition rates in the nation
- Gain insight into the practical issues of building systems by participating in intensive project-oriented courses.
- Enables students to complement their formal foundation in CS with the flexibility to pursue additional studies in other disciplines.

Computer Science spans the range from theory through programming to cutting-edge development of computing solutions. Computer Science offers a foundation that permits graduates to adapt to new technologies and new ideas. The work of computer scientists falls into three categories:

- designing and building software
- developing effective ways to solve computing problems, such as storing information in databases, sending data over networks, or providing new approaches to security problems
- devising new and better ways of using computers and addressing particular challenges in areas such as robotics, computer vision, or digital forensics

Like most Computer Science programs, the YSU Computer Science major requires significant mathematical background.

The Computer Science program leads to the degree of Bachelor of Science. The flexibility of the program allows the student many choices including a second minor.

This degree may be earned in eight semesters if students average 16 hours per semester.

In addition to completing all general University requirements, students wishing to receive the Bachelor of Science in computer science must complete the following:

**General Education Requirements**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 1550</td>
<td>Writing 1</td>
<td>3-4</td>
</tr>
<tr>
<td>or ENGL 1549</td>
<td>Writing 1 with Support</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 1551</td>
<td>Writing 2</td>
<td>3</td>
</tr>
<tr>
<td>CMST 1545</td>
<td>Communication Foundations</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics Requirement</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>MATH 1571</td>
<td>Calculus 1</td>
<td>4</td>
</tr>
<tr>
<td>PHIL 2625</td>
<td>Introduction to Professional Ethics</td>
<td>3</td>
</tr>
<tr>
<td>Arts and Humanities (1 course)</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Natural Sciences (2 courses; one course must include a lab)</td>
<td></td>
<td>6-7</td>
</tr>
<tr>
<td>Social Science (2 courses)</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Social and Personal Awareness (2 courses)</td>
<td></td>
<td>6</td>
</tr>
</tbody>
</table>

**Major Requirements**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSIS 2610</td>
<td>Programming and Problem-Solving</td>
<td>4</td>
</tr>
<tr>
<td>CSIS 3700</td>
<td>Data Structures and Objects</td>
<td>4</td>
</tr>
<tr>
<td>CSIS 3701</td>
<td>Advanced Object-oriented Programming</td>
<td>3</td>
</tr>
<tr>
<td>CSIS 3740</td>
<td>Computer Organization</td>
<td>4</td>
</tr>
<tr>
<td>CSCI 3710</td>
<td>Introduction to Discrete Structures</td>
<td>3</td>
</tr>
<tr>
<td>CSCI 5806</td>
<td>Operating Systems</td>
<td>3</td>
</tr>
<tr>
<td>CSCI 5801</td>
<td>Software Engineering</td>
<td>3</td>
</tr>
<tr>
<td>CSCI 5870</td>
<td>Data Structures and Algorithms</td>
<td>3</td>
</tr>
<tr>
<td>CSCI 4890</td>
<td>Computer Projects (at least 2 s.h.)</td>
<td>2</td>
</tr>
<tr>
<td>ENGL 3743</td>
<td>Professional and Technical Writing</td>
<td>3</td>
</tr>
<tr>
<td>Select at least 12 additional semester hours from CSCI or CSIS courses.</td>
<td></td>
<td>12</td>
</tr>
</tbody>
</table>

This must include at least 9 s.h. from the following courses:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSIS 3722</td>
<td>Development of Databases</td>
<td>4</td>
</tr>
<tr>
<td>CSIS 3723</td>
<td>Networking Concepts and Administration</td>
<td>4</td>
</tr>
<tr>
<td>CSIS 3755</td>
<td>Information Assurance</td>
<td>4</td>
</tr>
<tr>
<td>CSCI 3770</td>
<td>Survey of Programming Languages</td>
<td>3</td>
</tr>
<tr>
<td>CSCI 5840</td>
<td>Theory of Finite Automata</td>
<td>3</td>
</tr>
</tbody>
</table>

**Mathematics Minor**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1572</td>
<td>Calculus 2</td>
<td>4</td>
</tr>
<tr>
<td>MATH 3720</td>
<td>Linear Algebra and Matrix Theory</td>
<td>3</td>
</tr>
<tr>
<td>STAT 3743</td>
<td>Probability and Statistics</td>
<td>4</td>
</tr>
<tr>
<td>Additional MATH course</td>
<td></td>
<td>3-4</td>
</tr>
</tbody>
</table>

Free Electives *Any courses to meet 120 total hours* 20

**Total Semester Hours** 120-124

**Year 1**

<table>
<thead>
<tr>
<th>SEMESTER</th>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>YSU 1500</td>
<td>Success Seminar</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>CSIS 2610</td>
<td>Programming and Problem-Solving</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>MATH 1571</td>
<td>Calculus 1</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>ENGL 1550</td>
<td>Writing 1</td>
<td>3-4</td>
</tr>
<tr>
<td>or ENGL 1549</td>
<td>or Writing 1 with Support</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GER Social Science</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

**Year 2**

<table>
<thead>
<tr>
<th>SEMESTER</th>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>CSIS 3701</td>
<td>Advanced Object-oriented Programming</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CSIS 3740</td>
<td>Computer Organization</td>
<td>4</td>
</tr>
</tbody>
</table>
Minor in Computer Databases

COURSE | TITLE | S.H.
--- | --- | ---
CSIS 1590 | Survey of Computer Science and Information Systems | 3
CSIS 2610 | Programming and Problem-Solving | 4
CSIS 3722 | Development of Databases | 3
CSIS 3726 | Visual/Object-Oriented Programming | 4
CSIS 3732 | Intranet Database Implementation | 3
CSIS 4822 | Database Applications | 3

Total Semester Hours | 20

Minor in Computer Networking

COURSE | TITLE | S.H.
--- | --- | ---
CSIS 1590 | Survey of Computer Science and Information Systems | 3
Select at least 15 hours from the following: 15-16
CSIS 3723 | Networking Concepts and Administration | 
CSIS 3782 | Cisco Networking Academy 1 | 
CSIS 3783 | Cisco Networking Academy 2 | 
CSIS 4823 | Data Communications Networking | 
CSIS 5883 | Remote Access and Multilayer Switched Networks | 
CSIS 5884 | Building Scalable Networks and Advanced Internetwork Troubleshooting | 
CSCI 5823 | Communication Networks | 

Total Semester Hours | 18-19

Minor in Computer Science

COURSE | TITLE | S.H.
--- | --- | ---
CSIS 2610 | Programming and Problem-Solving | 4
CSIS 3700 | Data Structures and Objects | 4
CSIS 3701 | Advanced Object-oriented Programming | 3
Select three of the following: 9-10
CSIS 3730 | Computer Graphics | 
CSIS 3740 | Computer Organization | 
CSIS 3760 | Electronic Commerce Programming | 
CSIS 4819 | Parallel and Distributed Computing | 
CSIS 5824 | Applied Artificial Intelligence | 
CSCI 5806 | Operating Systems | 
CSCI 5814 | Computer Architecture | 
CSCI 5870 | Data Structures and Algorithms | 

Total Semester Hours | 20-21

Minor in Electronic Commerce Technology

COURSE | TITLE | S.H.
--- | --- | ---
CSIS 1590 | Survey of Computer Science and Information Systems | 3
CSIS 2610 | Programming and Problem-Solving | 4
CSIS 2660 | Foundations of Electronic Commerce | 3
CSIS 3732 | Intranet Database Implementation | 3
CSIS 3760 | Electronic Commerce Programming | 3
CSIS 3761 | Electronic Commerce Strategies | 3

Total Semester Hours | 19

Request a Graduation Evaluation after completing 80-85 s.h. from the STEM Advising Center, 2325 Moser Hall, (330) 941-2512.

Learning Outcomes

Computer science students in the BS degree program will:

- be able to analyze, design, implement and test computer programs by using the appropriate data structures and algorithms.
- obtain full-time employment as programmers, systems analysts, computer specialists and in other closely related fields or/and acceptance to graduate programs.
- communicate effectively with written reports and presentations.
## Minor in Information Systems Programming

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSIS 2610</td>
<td>Programming and Problem-Solving</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Select at least 14 hours from the following:</td>
<td>14</td>
</tr>
<tr>
<td>CSIS 3700</td>
<td>Data Structures and Objects</td>
<td></td>
</tr>
<tr>
<td>CSIS 3701</td>
<td>Advanced Object-oriented Programming</td>
<td></td>
</tr>
<tr>
<td>CIS 3714</td>
<td>Assembly Language and Architecture</td>
<td></td>
</tr>
<tr>
<td>CSIS 3726</td>
<td>Visual/Object-Oriented Programming</td>
<td></td>
</tr>
<tr>
<td>CIS 3735</td>
<td>UNIX Environment</td>
<td></td>
</tr>
<tr>
<td>CSIS 3760</td>
<td>Electronic Commerce Programming</td>
<td></td>
</tr>
</tbody>
</table>

Total Semester Hours: **18**

## Minor in Integrated Technologies

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSIS 1590</td>
<td>Survey of Computer Science and Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>INFO 1575</td>
<td>Document Preparation</td>
<td>4</td>
</tr>
<tr>
<td>INFO 3714</td>
<td>Advanced Spreadsheets</td>
<td>3</td>
</tr>
<tr>
<td>INFO 3774</td>
<td>Multimedia Technology</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Select two of the following:</td>
<td>6</td>
</tr>
<tr>
<td>INFO 3787</td>
<td>Training and Employee Development</td>
<td></td>
</tr>
<tr>
<td>CSIS 3723</td>
<td>Networking Concepts and Administration</td>
<td></td>
</tr>
<tr>
<td>CSIS 3722</td>
<td>Development of Databases</td>
<td></td>
</tr>
</tbody>
</table>

Total Semester Hours: **20**

## Minor in Interdisciplinary Game Studies

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 2691</td>
<td>Introduction to Digital Media</td>
<td>3</td>
</tr>
<tr>
<td>ART 3748</td>
<td>Special Topics in Studio Art</td>
<td>3</td>
</tr>
<tr>
<td>CSIS 1595</td>
<td>Fundamentals of Programming and Problem- Solving</td>
<td>3</td>
</tr>
<tr>
<td>CSIS 3737</td>
<td>Game Programming</td>
<td>3</td>
</tr>
<tr>
<td>MUIN 1561</td>
<td>Music Recording Workshop</td>
<td>4</td>
</tr>
<tr>
<td>MUIN 3762</td>
<td>Digital Sound Production</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>If any of the above are required for your major, you must find an appropriate replacement course from the list below. The replacement course(s) must be in a department different from your own.</td>
<td></td>
</tr>
<tr>
<td>ART 1501</td>
<td>Fundamentals of 2D Design</td>
<td>3</td>
</tr>
<tr>
<td>ART 1521</td>
<td>Foundation Drawing</td>
<td>3</td>
</tr>
<tr>
<td>CSIS 3738</td>
<td>Graphics and Animation for Gaming</td>
<td>3</td>
</tr>
<tr>
<td>CSIS 5837</td>
<td>Artificial Intelligence in Game Design</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Semester Hours: **19**

## Minor in Object-Oriented Programming

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSIS 1590</td>
<td>Survey of Computer Science and Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>CSIS 2610</td>
<td>Programming and Problem-Solving</td>
<td>4</td>
</tr>
<tr>
<td>CSIS 3700</td>
<td>Data Structures and Objects</td>
<td>4</td>
</tr>
<tr>
<td>CSIS 3701</td>
<td>Advanced Object-oriented Programming</td>
<td>3</td>
</tr>
<tr>
<td>CSIS 3726</td>
<td>Visual/Object-Oriented Programming</td>
<td>4</td>
</tr>
<tr>
<td>CSIS 3760</td>
<td>Electronic Commerce Programming</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Semester Hours: **21**

## Engineering Technology

### Civil & Construction, Electrical, Mechanical Engineering Technology, and Power Plant Technology

#### Associate of Technical Study Degree

- **Associate of Technical Study (ATS) degree** in
  - Power Plant (Electrical Utilities) Technology.

Students in this program are awarded academic credit for skills-related experience and training to compliment the academic coursework at YSU.

#### Associate of Applied Science Degree

Three programs offer associate degrees in:
- Civil and Construction Engineering Technology
- Electrical Engineering Technology
- Mechanical Engineering Technology

Graduates of these programs are awarded the Associate of Applied Science degree and may serve as engineering technicians.

Graduates of the associate degree programs having enough technical knowledge to support scientists and engineers and therefore can obtain an internship or full-time employment. Their work is in the design, drafting (CAD), development, testing, and production phases of engineering projects. Their tasks include laboratory testing, data gathering, evaluation, and instrument calibration. They may perform quality-control tests, inspectors, serve as technical sales representatives, or serve as technical writers in the formulation of specifications or trade manuals.

Degrees in these programs may be earned in four semesters if students average 17-18 hours per semester.

### Bachelor of Science in Applied Science Degree

The Civil and Construction Engineering Technology (CCET), Electrical Engineering Technology (EET), and Mechanical Engineering Technology (MET) programs are based on the “two-plus-two” educational system which provides the student with the flexibility of earning an associate degree and a bachelor’s degree according to his or her needs. After completing the requirements of the associate degree, the student may elect to: a) continue their education in pursuit of a bachelor degree which is two years of full-time study (averaging 17 hours per semester) or equivalent part-time study, earn the Bachelor of Science in Applied Science (BSAS); b) pursue professional employment; or c) enter industry and continue their education in pursuit of a bachelor degree.
Graduates of a BSAS degree program obtain employment as engineers or engineering designers for government agencies, consulting engineers, architects, industry and manufacturing, and contractors. Because their education is more extensive, they are prepared for more responsibility and more-rapid advancement. BSAS engineering technology graduates work as engineers doing design work, inspectors, project managers, production and maintenance managers/supervisors.

Based on an evaluation of their work, transfer students who have a related associate degree from a regionally accredited institution may be admitted to the bachelor’s degree program at the junior level.

**Accreditation and Registration**

The Civil and Construction, Electrical, and Mechanical Engineering Technology associate and bachelor programs are accredited by the ETAC Accreditation Commission of ABET, http://www.abet.org. In most states, including Ohio, West Virginia and Pennsylvania, bachelor’s degree graduates are qualified to take the Fundamentals of Engineering (FE) exam, and, with sufficient work experience, the Professional Engineers (PE) exam. Graduates are also qualified to apply to the National Institute for Certification in Engineering Technologies (NICET) for certification procedures in various specialty areas, depending on academic major and employment area.

**Admission Requirements**

Admission to all of engineering technology programs requires at least one year of high school algebra and one year of high school geometry with grades of “C” or better. Transfer students must be in good standing at their previous institution. All freshmen must take the Mathematics Placement Test prior to admission into an engineering technology program.

Students not meeting the admission requirements are enrolled as pre-majors in the College of Science, Technology, Engineering, and Mathematics. While advising is provided by professional advisors within the college, these students are also encouraged to see the coordinator of the program in which they are interested for further orientation.

Qualified engineering technology students must enroll in the ENTC 1505 Engineering Technology Concepts course. It is designed to acquaint students with the nature of the engineering career area, and therefore assist prospective students in determining the level of their interest. ENTC 1505 Engineering Technology Concepts is required of all engineering technology majors.

**Power Plant (Electrical Utilities) Technology**

This program prepares graduates to perform basic operating functions required in electric or gas utility power plants and other related industries. Students gain knowledge in:

- electrical machinery and controls
- power plant operations
- boiler, turbine, and generator operations
- power plant instrumentation
- pollution control equipment

In addition, college writing, oral communications, and general education form an integral part of the program. Upon successful completion of the program, students are prepared for entry-level employment in the utility industry.

For more information, visit Power Plant (Electrical Utilities) Technology.

**Civil and Construction Engineering Technology**

Students in the Civil and Construction Engineering Technology (CCET) program may choose to complete two years of study and earn an Associate of Applied Science (AAS) degree. The AAS degree provides early access to employment in engineering support positions. Upon completion of the AAS degree, the student may continue on for the Bachelor of Science in Applied Science (BSAS) degree. This program provides additional coursework, continuing the student’s growth to that of an engineering technologist or designer. Exceptional students may be eligible for enrollment in a Master of Engineering, Engineering Management, or Master of Business Administration program.

**Program Educational Objectives**

Educational objectives for the civil and construction engineering technology program have been developed by faculty and the program industrial advisory committee to support the university, college, program mission. Graduates of the CCET associate degree program are prepared to:

- Secure employment and achieve recognition in a technical career related to their civil and construction engineering technology degree
- Continue to gain professional knowledge through lifelong learning and communicate effectively in a professional environment
- Advance in pursuit of the BSAS degree

Bachelor’s degree graduates are prepared to assist with planning, design, inspection, and direction of the construction of projects involving buildings, roads, dams, bridges, airports, and wastewater treatment facilities. During their first few years after earning the CCET bachelor degree at YSU, graduates will have demonstrated the ability to:

- Secure employment and achieve recognition in a technical career related to their civil and construction engineering technology degree
- Continue to gain professional knowledge through lifelong learning and communicate effectively in a professional environment

**Program Outcomes**

Graduates with a civil and construction engineering technology degree will achieve the following learning outcomes by the time they graduate:

**Associate of Applied Science Degree Program**

Graduates of the associate degree in civil and construction engineering technology will possess the following competencies upon graduation:

- **Learning Outcome 1**: use graphic techniques to produce engineering documents and use modern instruments, methods, and techniques to implement construction contracts, documents, and codes
- **Learning Outcome 2**: conduct standardized field/laboratory testing on civil engineering materials and evaluate materials/methods for construction projects
- **Learning Outcome 3**: utilize modern surveying methods for land measurement and/or construction layout
- **Learning Outcome 4**: determine forces and stresses in elementary structural systems
- **Learning Outcome 5**: estimate material quantities and costs for technical projects
- **Learning Outcome 6**: employ productivity software to solve technical problems

**Bachelor of Science in Applied Science Degree Program**

Graduates of the bachelor degree in civil and construction engineering technology will possess the following competencies upon graduation:

- **Learning Outcome 1**: ability to plan, prepare, and utilize design, construction, and operations documents, such as specifications, contacts, change orders, engineering drawings, and construction schedules
- **Learning Outcome 2**: perform economic analyses and cost estimates related to design, construction, operations, and maintenance of systems related to civil and construction engineering
- **Learning Outcome 3**: ability to select appropriate construction and engineering materials/practices
Electrical Engineering Technology

Students in the Electrical Engineering Technology (EET) program may choose to complete two years of study and earn an Associate of Applied Science (AAS) degree. The AAS provides early access to employment in engineering support positions. Upon completion of the AAS degree, the student may continue on for the Bachelor of Science in Applied Science (BSAS) degree. This program provides additional coursework, continuing the student’s growth to that of an engineering technologist or designer. Exceptional students may be eligible for enrollment in a Master of Engineering, Engineering Management, or Master of Business Administration program.

Educational Objectives

Educational objectives for the electrical engineering technology program have been developed by faculty and the program industrial advisory committee to support the university, college, and program mission. Graduates of the EET associate degree program are prepared to:

- Secure employment and achieve recognition in a technical career related to their Electrical Engineering Technology degree.
- Continue to gain professional knowledge through lifelong learning and communicate effectively in a professional environment.
- Advance in pursuit of the BSAS degree.

Bachelor’s degree graduates are prepared to assist with planning, design, inspection, and direction of the electrical engineering projects involving electrical systems, industrial automation, smart grid and power distribution, and computer networking systems.

During their first few years after earning the EET bachelor degree at YSU, graduates will have demonstrated the ability to:

- Secure employment and achieve recognition in a technical career related to their civil and construction engineering technology degree.
- Continue to gain professional knowledge through lifelong learning and communicate effectively in a professional environment.

Program Outcomes

Graduates in electrical engineering technology will achieve the following learning outcomes by the time they graduate:

Associate of Applied Science

Graduates of the Associate Degree EET program will possess the following competencies upon graduation:

- **Learning Outcome 1**: be able to apply principles of mathematics and applied science, to perform technical calculations and solve technical problems of the types commonly encountered in electrical engineering technology careers.
- **Learning Outcome 2**: demonstrate the ability to identify, formulate, and present creative solutions to technical problems in a variety of specialty areas within the broad fields of electrical engineering technology.
- **Learning Outcome 3**: be able to function competently in a laboratory setting, making measurements, operating technical equipment, critically examining experimental results, and properly reporting on experimental results, including their potential for improvement.
- **Learning Outcome 4**: be able to use modern computational tools for technical problem solving, including scientific calculators, computers, and appropriate software.
- **Learning Outcome 5**: demonstrate a broad education and knowledge of contemporary issues in a global and societal context, as necessary to develop professional and ethical responsibility, including responsibility to employers and to society at large.
- **Learning Outcome 6**: recognize the need for life-long learning and possess the skills to maintain and improve technical and non-technical abilities.
- **Learning Outcome 7**: demonstrate an ability to communicate and function effectively with members of multi-disciplinary teams from a variety of backgrounds.
- **Learning Outcome 8**: demonstrate an ability to utilize computer software applications used in electrical engineering technology such as CAD, spreadsheets, word processing, and basic programming.

Bachelor of Science in Applied Science

Graduates of the bachelor’s degree EET program will possess the following competencies upon graduation:

- **Learning Outcome 1**: be able to apply principles of mathematics and applied science, to perform technical calculations and solve technical problems of the types commonly encountered in electrical engineering technology careers.
- **Learning Outcome 2**: demonstrate the ability to identify, formulate, and present creative solutions to technical problems in a variety of specialty areas within the broad fields of electrical engineering technology.
- **Learning Outcome 3**: be able to function competently in a laboratory setting, making measurements, operating technical equipment, critically examining experimental results, and properly reporting on experimental results, including their potential for improvement.
- **Learning Outcome 4**: be able to use modern computational tools for technical problem solving, including scientific calculators, computers, and appropriate software.
- **Learning Outcome 5**: demonstrate a broad education and knowledge of contemporary issues in a global and societal context, as necessary to develop professional and ethical responsibility, including responsibility to employers and to society at large.
- **Learning Outcome 6**: recognize the need for life-long learning and possess the skills to maintain and improve technical and non-technical abilities.
- **Learning Outcome 7**: demonstrate an ability to communicate and function effectively with members of multi-disciplinary teams from a variety of backgrounds.
- **Learning Outcome 8**: the ability to identify, formulate, and solve engineering problems in the following major electrical engineering technology disciplines: analog and digital electronics, communication systems, power, aerospace and computer systems.
- **Learning Outcome 9**: the knowledge of professional practice issues, with an understanding of social responsibilities and a respect for diversity.

Associate Degree Program

Graduates of the two-year electrical engineering technology program generally function as assistants to electrical engineers in the design, analysis, and laboratory testing of electrical and electronic systems and of rotating machinery. Most graduates are employed by electrical and electronic equipment manufacturers, utility companies, the aerospace industry, and manufacturing companies in general.

Bachelor’s Degree Program

The bachelor’s degree program in electrical engineering technology prepares students for employment as engineering technologists or engineering designers. The students focus on analog and digital electronics communication systems, smart grid and power distribution, and computer networking systems. Co-op programs with various local companies enable EET students to gain experience and income during their junior and senior years. Many students work full or part-time while completing the BSAS degree.
taking evening classes. Students are encouraged to take the Fundamentals of Engineering (FE) exam as the first step toward professional registration.

**Mechanical Engineering Technology**

The Mechanical Engineering Technology (MET) program is designed as a "two-plus-two" program. Students may earn an Associate of Applied Science degree after two years of full-time study. With this degree, they may begin a career in industry. The associate degree graduate can continue for two more years of full-time study to earn the bachelor's degree.

**Program Educational Objectives**

Educational objectives for the MET program have been developed by faculty and the program industrial advisory committee to support the university, the college, and the program mission. Graduates of the MET associate degree program function as assistants in the design, drafting and testing of mechanical products, equipment and processes. Bachelor's degree graduates assume greater responsibility in the design and testing of mechanical products, manufacturing processes, equipment.

During their first few years after completion of the mechanical engineering technology program at YSU, graduates will have demonstrated the ability to:

- Work competently in technical and professional careers related to the field of mechanical engineering technology.
- Communicate effectively in a professional environment.
- Continue growth in professional knowledge and skills.
- Achieve recognition and/or compensation consistent with their educational achievements.

**Program Outcomes**

Associate of Applied Science

Graduates of the associate degree MET program will possess the following competencies upon graduation:

- mastery of knowledge, skills, and tools of the discipline
- ability to apply knowledge to solve engineering problems
- ability to conduct, analyze, and interpret experiments
- ability to work effectively in teams
- ability to identify, analyze, and solve technical problems
- ability to communicate effectively
- recognition of the need to engage in lifelong learning
- ability to understand professional, ethical, social, and diversity responsibilities and diversity
- commitment to quality, timeliness, and continuous improvement

Bachelor of Science in Applied Science

Graduates of the bachelor's degree MET program will possess the following competencies upon graduation:

- mastery of knowledge, skills, and tools of the discipline
- ability to apply knowledge to solve engineering problems
- ability to conduct, analyze, and interpret experiments
- ability to be creative in design
- ability to work effectively in teams
- ability to identify, analyze, and solve technical problems
- ability to communicate effectively
- recognition of the need to engage in lifelong learning
- ability to understand professional, ethical, and social responsibilities
- respect for diversity, professional, societal, and global issues
- commitment to quality, timeliness, and continuous improvement

**Professors**

Theodore R. Bosela, Ph.D., Professor
Michael D. Costarell, M.S.M.E., Professor
Robert J. Korenic, M.S.E., Associate Professor
Carol M. Lamb, Ph.D., Professor, Acting Director
John D. Martin, M.S., Associate Professor
Joseph S. Sanson, M.S., Associate Professor
Brian D. Vukasovich, M.S.M.E., Associate Professor
Jason Zapka, M.S., Assistant Professor
Lecturer
Daniel P. Coyne, B.A., Senior Lecturer

**Majors**

- Power Plant (Electrical Utilities) Technology Associate of Technical Studies (p. 472)
- Civil and Construction Engineering Technology Associate Degree Program (p. 469)
- Civil and Construction Engineering Technology Bachelor's Degree Program (p. 473)
- Electrical Engineering Technology Associate Degree Program (p. 470)
- Electrical Engineering Technology Bachelor's Degree Program (p. 475)
- Mechanical Engineering Technology Associate Degree Program (p. 471)
- Mechanical Engineering Technology Bachelor's Degree Program (p. 478)

**Minors**

- Minor in Electrical Engineering Technology (p. 480)

**Civil and Construction Engineering Technology**

CCET 1503 CAD Technology 2 s.h.

Basic instruction in the use of AutoCAD computer-aided drafting system. Includes primary 2D skills including dimensioning, blocks, external reference and plotting. Customization methods and an introduction to application programming. One and one-half hours lecture, one and one-half hours lab per week. Grading is A, B, C, NC.

Prereq.: "C" or better in MATH 1510, corequisite MATH 1513 or MATH 1511 or at least Level 40 on the Mathematics Placement test.

CCET 1504 Drafting and Plan Reading 2 s.h.

Drafting basics including plan, section, and elevation views; orthographic projections; line types and weights; drafting scales; dimensioning; tolerances; grading and contours, and construction layout for the civil, mechanical, and electrical technology disciplines. Development of skills in the interpretation and preparation of plans used for civil, mechanical, and electrical construction and fabrication. One and one-half hours lecture, one and one-half hours laboratory per week. Grading is A, B, C, NC.

Prereq.: "C" or better in MATH 1510, Corequisite MATH 1513 or MATH 1511 or at least Level 40 on Mathematics Placement Test.

CCET 2604 Properties and Strength of Materials 3 s.h.

Introduction to the physical and chemical properties of materials and their behavior under various loads and environments. Concepts of stress and strain developed and evaluated for the application of axial, shear, torsional, and bending loads. Four (4) hours lecture per week. Prereq. or.

Prereq.: Grade of 'C' or better in ENTC 1505 and MATH 1513 or MATH 1510 and MATH 1511.

Coreq.: MET 1515.
CCET 2607 Civil 3D 3 s.h.
Civil 3D is a course intended to prepare students for entry-level production use of AutoCAD Civil 3D 2015. The primary goal of this class is to teach students how to use the software, but it is also an opportunity to show them how projects are executed and what types of roles they will play in completing them. One (1) hour lecture and three (3) hours lab per week.
Prereq.: "C" or better in CCET 1503 and CCET 1504.

CCET 2614L Materials Laboratory I 2 s.h.
Use and care of testing equipment, data retrieval, data reduction and report preparation. Physical testing of metals, concrete, aggregates, asphalts, soils and woods. Three hours per week.
Prereq or concurrent: CCET 2604.

CCET 2617 Construction Methods and Materials 3 s.h.
Prereq.: CCET 2604, MET 1515 both with a grade of "C" or better.

CCET 2620 Transportation Technology 3 s.h.
Transportation planning and highway system design. Familiarization with AASHTO design manuals; geometric design and signalization of highway segments; capacity analysis and route selection. Cost-benefit analysis for transportation projects. Four (4) hours lecture per week. Prereq. "C" or better in CCET 2604.

CCET 3705 Computing for Technologists 3 s.h.
Development of computer techniques used in solutions to problems in all fields of engineering technology. Students write computer programs to solve problems with which they are familiar. Use of database management, spreadsheets. May be taken by non-CCET majors. Two hours lecture, three hours lab per week.
Prereq.: MATH 1570 or MATH 1571 grade of "C" or better and junior standing or consent of instructor.

CCET 3706 Structural Design 4 s.h.
Structural design using AISC, ACI and similar codes. Selection of members and connections in accordance with manuals and code specifications. Design and AutoCAD projects required. Three hours lecture and three hours computational lab per week.
Prereq.: "C" or better in CCET 1503, CCET 1504, MET 1515, MATH 1513 or MATH 1510 and MATH 1511, CCET 2604.

CCET 3708 Building Information Modeling 3 s.h.
Introduction and applications of Autodesk Revit 3D CAD program. Use of Revit software to assemble a complete building information model of a building and use the model to coordinate systems between disciplines, to create material take-offs, construction documents, and presentation drawings. Two hours lecture, three hours lab per week.
Prereq.: "C" or better in CCET 3706.

CCET 3709 Structural Analysis I 3 s.h.
Fundamental determination of member forces in trusses, beams, arches, frames and cables. Calculation of member stresses and deflections. Two hours lecture, three hours computational lab per week.
Prereq.: ENTC 1505, MATH 1513 or MATH 1510 and MATH 1511, CCET 2604, all with a grade of "C" or better.

CCET 3711 Specifications and Estimating 3 s.h.
Fundamentals of writing and interpreting specifications for materials and construction methods. Estimating materials and labor costs for construction projects. Use of computer estimating packages. Two hours lecture and three hours computational laboratory.
Prereq.: ENTC 1505, MATH 1513 or MATH 1510 and MATH 1511, CCET 2604, MET 1515 grade of "C" or better.

CCET 3714 Soil Mechanics 2 s.h.
A study of soil properties, classifications, strength and behavior. Theory of consolidation, shear strength and stability analysis. Two hours lecture per week.
Prereq.: "C" or better in the following courses CCET 2614L, CCET 3706, CCET 3709.

CCET 3714L Soil Mechanics Laboratory 1 s.h.
Practice in soil identification and determination of soil properties. Use and care of basic soil testing equipment and standard test procedures. Three laboratory hours per week.
Concurrent with: CCET 3714.

CCET 3719 Environmental Impact of Abandoned Mines 3 s.h.
Mining methods, types of mines, information retrieval, mine stabilization, and the effects of abandoned mines on environmental and human activities, especially deep coal mines in the Mahoning Valley and adjacent areas. Two hours lecture and three hours of lab per week. Prereq. GEOL 1505 or equivalent permission of instructor.

CCET 3724 Hydraulics and Land Development 3 s.h.
Study of hydraulics and hydrologic principles and their applications to drainage requirements, storm-water management, detention/retention basin design, erosion and sedimentation control plans and land-use planning. Use of computer software for analysis and design. Two hours lecture, three hours of computational lab per week.
Prereq.: CCET 1503, CCET 1504, ENTC 1505, MATH 1513 or MATH 1510 and MATH 1511, CCET 2604, MET 1515 all with a grade of "C" or better.

CCET 3735 Heavy Highway Technology 3 s.h.
Study of principles of heavy highway construction as it relates to the current highway system. The reading and comprehension of highway construction plans and specifications. Four (4) hours lecture per week.
Prereq.: "C" or better in CCET 2620.

CCET 3740 Construction Management 3 s.h.
Design and construction office planning and scheduling techniques. Construction reports, contracts, specifications and general conditions. Relationships among owner, architect/engineer, and constructor. Introduction to computer methods for program planning and updating. Financial, labor, and material resource allocation and tracking. Four (4) hours lecture per week.
Prereq.: "C" or better in CCET 3711.

CCET 4807 Project Planning & Scheduling 3 s.h.
Application of planning, scheduling, and control system techniques for an integrated project including theory, options, legal implications, and practices. Students plan and schedule projects using CPM computer software and set up control systems for the project. Three hours lecture, one hour laboratory per week.
Prereq.: "C" or better in CCET 3711.

CCET 4809 Structural Analysis II 3 s.h.
Continuation of CCET 3709. Analysis techniques for common structures. Introduction to classical approaches to statically indeterminate structures and calculation of deflections. Use of standard computer programs such as StruCalc, SAP and SABLE. Three hours lecture, one hour computational lab per week.
Prereq.: "C" or better in both CCET 3709 and MATH 1570 or MATH 1571.

CCET 4810 Construction Surveying 3 s.h.
Theory and applications of advanced land surveying techniques for: route surveying and geometric design; topographic site surveys and mapping; civil engineering, utilities, and construction surveys; global positioning systems; and quantities and final surveys. Two hours lecture and three hours field surveying laboratory.
Prereq.: "C" or better in CEEN 2610, CEEN 2610L.

CCET 4812 Concrete Design 3 s.h.
Behavior and design of concrete elements subject to flexure, shear, axial and combined effects. Emphasis on reinforced concrete design in accordance with the ACI Code including beams, T-beams, slabs, walls, and columns. An introduction to prestressed and precast concrete design. Three hours lecture, one hour design lab per week.
Prereq.: "C" or better in both CCET 3706 and CCET 3709.
CCET 4813 Steel Design 3 s.h.
Loading and behavior of steel structures and design of standard rolled shapes in accordance with current LRFD and ASD specifications. Design of welded and bolted connections and an introduction to design of cold-formed steel members. Three hours lecture, one hour design lab per week. Prereq.: "C" or better in both CCET 3706 and CCET 3709.

CCET 4814 Foundation Design 3 s.h.
Application of soil mechanics to the design of foundations. Topics include spread footings, drilled piers, piles, retaining walls, sheet piles walls and underground structures. Three hours lecture. Three hours lab per week. Prereq.: "C" or better in CCET 3714 and CCET 3714L.

CCET 4815 Masonry Design 3 s.h.
Design of beams, columns, shear walls and bearing walls using clay and concrete masonry units. Application of allowable stress design (ASD) and strength design (SD) in accordance with the MSJC Building Code Requirements for Masonry Structures. Additional topics include prestressed and autoclaved aerated concrete (AAC) masonry. Three hours lecture, one hour lab per week. Prereq.: "C" or better in both CCET 3706 and CCET 3709.

CCET 4816 Timber Design 3 s.h.
Design of beams, poles, piles, diaphragms, shear walls and fasteners using timber elements. Application of the National Design Specification for Wood Construction that incorporates a dual format using both allowable stress design (ASD) and load and resistance factor design (LRFD). Additional topics include glued-laminated members and design of mechanical connectors. Design, analysis, construction, and testing of scale models is required. Three hours lecture, one hour lab per week. Prereq.: "C" or better in both CCET 3706 and CCET 3709.

CCET 4824 Environmental Technology 3 s.h.
Application of environmental principles to land planning and development. Wastewater treatment processes and system design. Application of water and wastewater management to specific sites. Permitting and endangerment assessment. Three hours lecture, one hour computational lab per week. Prereq.: "C" or better in CCET 3724 and junior standing.

CCET 4884 Civil/Structural Facilities Design 3 s.h.
Interdisciplinary capstone course. An overview of the requirements and design procedures for civil and structural systems. Includes the analysis and design for site development, utilities, foundation, wall systems, framing systems, floor system and the preparation of the plans, specifications and estimate package. Includes a major interdisciplinary group project. Four (4) hours lecture per week. Prereq. or Coreq.: EET 4810.

CCET 4890 Special Topics in Civil and Construction Engineering Technology 1-4 s.h.
New developments in CCET. Subject matter, special prerequisites, and credit hours to be announced in advance of each offering. May be repeated with different subject matter to a maximum of 8 s.h. Prereq.: Senior standing in CCET or consent of the instructor.

Electrical Engineering and Technology

EET 1501 Circuit Theory 1 3 s.h.
Theoretical analysis of DC electrical circuits including units conversions, current voltage, power, Ohms Law, Kirchhoffs Laws, network theorems, capacitance, magnetic circuits, inductance and transient analysis of RL and RC circuits. Prerequisite or concurrent: ENTC 1505, MATH 1513 or MATH 1510 and MATH 1511; concurrent with EET 1501L. 3 s.h.

EET 1501L Circuit Theory 1 Lab 1 s.h.
Use of electrical components to construct circuits and use of electrical instrumentation including meters and oscilloscopes to analyze DC resistive series/parallel networks and basic RC & RL transient circuits. Computer circuit analysis with PSPICE. Three hours per week. Concurrent with: EET 1501.

EET 1502 Circuit Theory 2 3 s.h.
Study of AC sinusoidal waveforms, phasor representations, phasor algebra and phasor diagrams. Solution of steady state single phase series/parallel networks including network theorems, power and power factor, resonant circuits, filters, mutual inductance, transformers and balanced three-phase systems. Prereq.: "C" or better in EET 1501 and EET 1501L and MATH 1513, or MATH 1510 and MATH 1511, and ENTC 1505. Concurrent with: EET 1502L.

EET 1502L Circuit Theory 2 Lab 1 s.h.
Measure effective values of AC currents and voltages, observe waveforms with oscilloscopes, verify impedance concepts and phasor diagrams for AC series/parallel networks and resonant circuits. Computer circuit analysis with PSPICE. Three hours per week. Concurrent with: EET 1502.

EET 2605 Electronics 1 3 s.h.
Physical basis of semiconductor materials, diodes, rectifier circuits, Zener diode regulators, clippers, clamping, special purpose diodes. Bipolar junction transistors (BJT) characteristics, bias circuits, equivalent circuit models, amplifiers and field effect transistor (FET) characteristics. Prereq.: EET 1502 and EET 1502L or concurrent; "C" or better in the following: MATH 1513, or (MATH 1510 and MATH 1511).

EET 2605L Electronics 1 Laboratory 1 s.h.
Use of meters, oscilloscope, transistor curve tracer for experiments on diode characteristics, rectifier circuits, clippers, clamps, Zener regulators, BJT and FET characteristics, BJT bias circuits and amplifiers. Computer circuit analysis with PSPICE. Three hours per week. Concurrent with: EET 2605.

EET 2620 Digital Electronics 2 s.h.
An introductory study of number systems and conversions, codes, Boolean algebra, and logic gates. Includes Boolean function simplification, truth tables, Karnaugh maps, and combination circuits. Prereq.: "C" or better in MATH 1513 or MATH 1510 and MATH 1511, and EET 1501 and EET 1501L, and ENTC 1505. Concurrent with: EET 2620L.

EET 2620L Digital Electronics Lab 1 s.h.
Experiments utilizing digital integrated circuits to implement various logic functions discussed in EET 2620. Three hours per week. Concurrent with: EET 2620.

EET 2653 Fiber Optics 3 s.h.
Light propagation in fiber; connections, attenuation, and signal distortion; splicing and analysis of coupling losses; optical transmitters and receivers for analog and digital signals. Two hours lecture, three hours lab per week. Prereq.: "C" or better in EET 1502 and EET 1502L and EET 2605 and EET 2605L and MATH 1570.

EET 3700 Methods in Circuit Analysis 3 s.h.
Review of circuit analysis techniques using phasor algebra; mesh and nodal analysis; Thevenin and Norton equivalents; superposition theorem; three phase circuits; circuit solutions using matrix methods; and Fourier analysis of periodic waveforms with applications to circuit analysis. Two hours lecture and three hours computational lab per week. Prereq.: Grade of C or better in the following: EET 3706 and EET 3706L and EET 3710 and EET 3710L and EET 3735 and EET 3735L and (MATH 1570 or MATH 1571).

Coreq.: MATH 2670.

EET 3701 Transform Circuit Analysis 3 s.h.
Introduction to LaPlace transforms and the use of LaPlace transforms in circuit analysis, transfer functions, frequency response of networks, poles and zeroes, stability, Bode plots. Two hours lecture and three hours of computational lab per week. Prereq.: MATH 2670 and EET 3700 with a grade of "C" or better.
EET 3706  Electronics 2  3 s.h.
Field effect transistor (FET) bias circuits and amplifiers, thyristor circuits, frequency effects (Bode plots), differential amplifiers, linear and non-linear op-amp circuits, active filters, oscillators and regulated power supplies.
Prereq.: "C" or better in EET 1502 and EET 1502L and EET 2605 and EET 2605L and MATH 1570.
Concurrent with: EET 3706L.

EET 3706L  Electronics 2 Laboratory  1 s.h.
Experiments involving field effect transistors (FETs), integrated circuits (ICs), operational amplifiers, frequency effects on gain, oscillator circuits and regulated power supplies. Computer circuit analysis with PSPICE. Three hours per week.
Concurrent with: EET 3706.

EET 3710  Electrical Machines  3 s.h.
Construction, operating principles and characteristics, efficiency and control of DC motors, generators, and specialized machines. AC single and 3-phase transformers, alternators, induction and synchronous motor principles, characteristics, efficiency and control.
Prereq.: "C" or better in EET 1502 and EET 1502L and ENTC 1505 and MATH 1570.
Concurrent with: EET 3710L.

EET 3710L  Electrical Machines Laboratory  1 s.h.
Experiments with DC motors and generators and AC transformers, alternators, induction and synchronous motors to observe operation, efficiency, control and machine characteristics. Three hours per week.
Concurrent with: EET 3710.

EET 3712  Programmable Logic Controllers  3 s.h.
Development of ladder logic programming and application to programmable logic controllers (PLCs). Examination of input/output (I/O) device characteristics and interfacing including both digital and analog I/O. Installation, maintenance and safety practices for PLCs.
Prereq.: "C" or better in EET 1502 and EET 1502L, and EET 2620 and EET 2620L and EET 3710 and EET 3710L and MATH 1570.

EET 3712L  PLC Laboratory  1 s.h.
Exercises in ladder logic programming for programmable logic controllers (PLCs) using concepts developed in EET 3712. Input/Output (I/O) concepts related to PLCs. Three hours per week.
Concurrent with: EET 3712.

EET 3715  Industrial Instrumentation and Control  3 s.h.
Introduction to industrial instrumentation and process control. Application of calculus, thermodynamics, and fluid flow to instrumentation and control systems. Characteristics of sensing devices including temperature, pressure, flow, level, position, analytical, vibration, etc. Analog electronic instrumentation and instrument calibration. Concepts of closed loop control, process dynamics and loop tuning, feedforward, feedback, and cascade control in industrial process systems. 2 hours lecture, 3 hours lab per week.
Prereq.: EET 3710 and EET 3710L and EET 2605 and EET 2605L and EET 2620 and EET 2620L and CHEM 1515 and CHEM 1515L and PHYS 1501 and (MATH 1570 or MATH 1571) with letter grade of C or better.

EET 3725  Electromechanical Systems  3 s.h.
AC/DC circuit analysis techniques including network theorems, MultiSim computer circuit analysis with applications to AC/DC machinery, electronics, digital circuits and control systems. Three hours lecture per week.
Prereq.: C or better in MATH 1570 and ENTC 1505.
Concurrent with: EET 3725L.

EET 3725L  Electromechanical Systems Laboratory  1 s.h.
Lab experiences to accompany EET 3725 Electromechanical Systems. Topics include lab safety, resistor color code, DC and AC circuits, oscilloscope and function generator, diode rectifiers, transistor switching circuits and amplifiers, three phase power measurements, transformer testing, DC and AC motor characteristics.
Prereq.: C or better in the following: MATH 1570, ENTC 1505.
Concurrent with: EET 3725.

EET 3730  Logic Systems Design  3 s.h.
The characteristics and applications of integrated circuit logic families and various memory devices. Emphasis on the design of digital systems with SSI, MSI, and LSI as system components.
Prereq.: "C" or better in EET 2620 and EET 2620L and EET 2605 and EET 2605L and EET 1502 and EET 1502L and MATH 1570.
Concurrent with: EET 3730L.

EET 3730L  Logic Systems Design Laboratory  0 s.h.
Laboratory exercises dealing with applications of concepts developed in EET 3730. Three hours per week.
Concurrent with: EET 3730.

EET 3735  Microprocessor Architecture and Programming  3 s.h.
An introduction to microprocessor architecture, memory organization, and input/output addressing. Emphasis on machine/assembly language programming to teach concepts of buses, machine cycles, and internal data flow. Two hours lecture and three hours of lab per week.
Prereq.: "C" or better in CSIS 1590 or EET 1501, EET 1501L, EET 2620, EET 2620L, and MATH 1513 or MATH 1510 and MATH 1511.

EET 3735L  Microprocessor Architecture and Programming Laboratory  0 s.h.
Microprocessor Architecture and Programming Laboratory.

EET 3745  Microprocessor Systems 2  3 s.h.
Continuation of EET 2645 with emphasis on advanced programming techniques, memory mapping, I/O ports, and basic I/O interfacing.
Prereq.: "C" or better in EET 3735 and EET 3735L and EET 1502 and EET 1502L and MATH 1570.

EET 3745L  Microprocessor Systems 2 Laboratory  0 s.h.
Laboratory exercises utilizing a microcomputer to provide practical applications of concepts developed in EET 3745. Three hours per week.
Concurrent with: EET 3745.

EET 3760  Variable Speed Drives  3 s.h.
Introduction to electronic speed control of direct and alternating current motors. Power conversion and waveform modulation techniques, drive sizing, harmonics, and motor performance.
Prereq.: "C" or better in EET 3710 and EET 3710L and EET 3706 and EET 3706L, EET 3700, and MATH 2670.
Concurrent with: EET 3760L.

EET 3760L  Variable Speed Drives Laboratory  0 s.h.
Exercises in variable speed drive applications, demonstrating the concepts developed in EET 3760.
Concurrent with: EET 3760.

EET 3780  Communication Systems  3 s.h.
Audio signals, noise, untuned and RF amplifiers, amplitude, frequency, pulse modulation, transmission lines, antennas, and multiplexing of communication channels.
Prereq.: "C" or better in the following: EET 1502, EET 1502L, EET 3706, EET 3706L, EET 3700, and MATH 2670.
Concurrent with: EET 3780L.

EET 3780L  Communication Systems Laboratory  0 s.h.
Laboratory exercises dealing with application of concepts developed in EET 3780. Three hours per week.
Concurrent with: EET 3780.

EET 4810  Electrical System Design  3 s.h.
The design and layout of electrical systems for power, light, heat, signals, and communications in commercial, industrial, and residential buildings. Two hours lecture, three hours of lab per week.
Prereq.: EET 3710 and EET 3710L or EET 3725 and EET 3725L, with grade of C or better.
EET 4812  Automation Systems Integration  3 s.h.
Network technologies that support system integration of process/manufacturing automation, building automation (smart buildings), environment management, as well as energy management and electricity systems automation (smart grid systems). Hardware and software, including NetDDE, OPC, and SCADA Systems comprising the infrastructure of Industrial Internet of Things (IIoT) and Industry 4.0. IIoT infrastructure components such as Artificial Intelligence based control systems, wireless technology in automation systems, safety systems, and organizational approach to automation. Two hours lecture and three hours lab per week.
Prereq.: EET 3701 and EET 3760 and EET 3745 and EET 3745L and CSIS 2610 and MATH 2670 and completion of one upper division technical elective with letter grade C or better.

EET 4815  Power System Studies  3 s.h.
Introduction to electrical power system studies including system modelling, load flow and voltage drop, short circuit, protective device coordination, motor transient starting, power quality, and arc flash calculations. Two hours lecture and three hours computational lab per week.
Prereq.: EET 3710 and EET 3710L and EET 3700 and MATH 2670 all with grades of "C" or better.

EET 4820  Power System Protection and Control  3 s.h.
An introduction to electrical power system protection and control utilizing intelligent smart grid technologies. Topics include power system analysis, real time data acquisition and control, synchrophasor measurements, communications, and application of microprocessor-based protective relaying. Two hours lecture per week.
Prereq.: "C" or better in EET 3710 and EET 3710L and EET 3712 and EET 3712L, EET 3700 and MATH 2670.

Concurrent with: EET 4820L.

EET 4820L  Power System Protection and Control Lab  0 s.h.
Establishing communications, programming, and testing of various microprocessor based power system protective relays, including time-overcurrent, bus, differential, motor, distributed generation, and transformer relays. Three hours lab per week.
Prereq.: "C" or better in EET 3710 and EET 3710L and EET 3712 and EET 3712L, EET 3700 and MATH 2670.

Concurrent with: EET 4820.

EET 4845  Microprocessor Systems 3  3 s.h.
Continuation of EET 3745 with emphasis on real data acquisition, A/D and D/A conversions, and industrial applications.
Prereq.: "C" or better in EET 3730 and EET 3730L and EET 3745 and EET 3745L and MATH 2670.

Concurrent with: EET 4845L.

EET 4845L  Microprocessor Systems 3 Lab  0 s.h.
Laboratory exercises utilizing a microcomputer to provide practical applications of concepts developed in EET 4845. Three hours per week.
Concurrent with: EET 4845.

EET 4850  Integrated Circuit Applications  3 s.h.
Introduction to integrated circuits technology and typical application.
Prereq.: "C" or better in EET 3706 and EET 3706L and EET 1502 and EET 1502L and MATH 2670.

Concurrent with: EET 4850L.

EET 4850L  Integrated Circuit Applications Lab  0 s.h.
Laboratory exercises dealing with the application of concepts developed in EET 4850. Three hours per week.
Concurrent with: EET 4850.

EET 4870  Process Control Technology  4 s.h.
Interdisciplinary capstone course. Analysis and design of control systems for industrial processes, utility automation, and electromechanical systems. Includes preparation of schematic, control, and wiring diagrams; specifications, estimates, project schedule, and presentation of results. Three hours lecture, three hours lab per week.
Prereq.: Grades of C or better in EET 3712 and EET 3712L and EET 3760 and EET 3760L and EET 3701 and EET 3780 and EET 3780L and EET 3745 and EET 3745L and MATH 2670 and EET 4810 and two EET electives and Senior standing in EET and permission of EET program coordinator.

EET 4880  Electrical and Mechanical Facilities Design  3 s.h.
Multidisciplinary study of building systems; HVAC, plumbing, electrical power, lighting, and communication systems. Computational labs and group projects for each topic. Two hours lecture and three hours computational lab.
Prereq.: Senior standing and permission of the CCET or EET student’s program advisor.
Concurrent: CCET 4884.

EET 4890  Special Topics in EET  1-4 s.h.
Special topics/new developments in electrical engineering technology. Subject matter, special prerequisites, and credit hours to be announced in advance of each offering. May be repeated with different subject matter to a maximum of 8 s.h.
Prereq.: Senior standing in EET or consent of the instructor.

Engineering Technology

ENTC 1500  Technical Skills Development  4 s.h.
A course designed to develop the technical, analytical and problem solving skills of students planning to enter an engineering or technical course of study. Three (3) hours of lecture and three (3) hours lab per week. Grading is A, B, C, NC.
Prereq. or concurrent: MATH 1501.

ENTC 1501  Introduction to Engineering Technology  2 s.h.
Understanding what engineering technology is, exploring careers for engineering technicians, time management and adjusting to the college environments, basic Excel functions and uses, performing labs and writing lab reports, writing class reports/term papers.

ENTC 1505  Engineering Technology Concepts  4 s.h.
The role of the technician, technologist, engineer and scientist in the technology team; a study of basic mathematical, scientific, and communicative techniques as applied to the work of engineering technologists; ethical, global, and societal issues facing the engineering technology professional. Three hours lecture, three hours lab per week. Grading is A, B, C, NC. Corequisite MATH 1513 or MATH 1511.
Prereq.: grade of "C" or better in MATH 1510.

ENTC 3799  Professional Practice in Engineering Technology  1 s.h.
This course provides students with cooperative education experiences in various engineering technology disciplines. To receive credit for the course, the student is expected to work at the assignment a minimum of 400 hours, submit a report of activities, and obtain approval of the department Professional Practice Committee. Course may be repeated up to a maximum of 3 s.h. toward the BSAS. Students are considered full-time even though only 1 s.h. is given for each course. Grading: PR, CR, NC.
Prereq.: Consent of department chairperson.

ENTC 4895  Independent Engineering Technology Project  1-4 s.h.
Individual study under direction of a faculty member. Written and oral report required. May be repeated for a maximum of 4 s.h.
Prereq.: Junior standing, consent of instructor, and prior approval of the project by the IETP committee of engineering technology faculty.
Electrical Utility Technology

**EUT 1500 Electrical Fundamentals 3 s.h.**
Introduction to direct and alternating current circuits. Study of resistance, capacitance, inductance, Ohm's and Kirchoff's Laws applied to circuits. Three hours lecture per week.
**Prereq.:** ENTC 1500 and MATH 1501 or at least level 3 on the Mathematics Placement Test.
**Concurrent with:** EUT 1500L.

**EUT 1500L Electrical Fundamentals Lab 1 s.h.**
Lab component of EUT 1500. Provides hands-on instruction in the use of electrical test equipment including digital multimeters, power supplies, oscilloscopes, etc. Three hours per week.
**Prereq.:** ENTC 1500 and MATH 1501 or at least level 3 on the Mathematics Placement Test.
**Concurrent with:** EUT 1500.

**EUT 1502 Power Plant Fundamentals 4 s.h.**
Introduction to power plant systems including boiler, turbine, generator, condenser, pumps, and auxiliary equipment. Emphasizes use of schematics and diagrams in discussing plant systems. Includes plant safety training. Four hours lecture per week.
**Prereq.:** MATH 1501 or Level 3 on MPT and eligible to enroll in ENGL 1550.
**Prereq. or concurrent:** ENTC 1500.
**Concurrent:** EUT 1502L.

**EUT 1502L Power Plant Fundamentals Lab 1 s.h.**
Lab component to accompany EUT 1502. Provides introduction to power generating plant systems and equipment including boiler, turbine, generator, condenser, pumps, and auxiliary equipment. Emphasizes the use of schematics and diagrams in discussing plant systems. Three hours laboratory per week.
**Concurrent with:** EUT 1502.

**EUT 1503 Power Plant Mechanical Equipment 3 s.h.**
Introduction to various mechanical equipment found in power plants including pumps, fans, blowers, valves, heat exchangers and power transmission equipment. Mechanical concepts of force and torque. Basic types of bearings, seals, and lubrication. Mechanical assembly drawings and diagrams. Three hours lecture per week.
**Prereq.:** ENTC 1500 and EUT 1502, EUT 1502L, and MATH 1501.
**Concurrent with:** EUT 1503L.

**EUT 1503L Power Plant Mechanical Equipment Lab 1 s.h.**
Lab component to accompany EUT 1503. Provides hands-on activities related to pumps, fans, blowers, valves, heat exchangers, bearings, seals, lubrication, and power transmission equipment. Three hours lab per week.
**Prereq.:** ENTC 1500, EUT 1502, EUT 1502L, and MATH 1501.
**Concurrent with:** EUT 1503.

**EUT 1504 Maintenance Fundamentals 1 4 s.h.**
Introduction to blueprint reading and technical diagrams, use of hand tools and power tools, safety and health, development of troubleshooting skills, chemical hazards, and material safety data sheets. Three hours lecture, and three hours lab per week.
**Prereq. or concurrent:** ENTC 1500.

**EUT 1505 Maintenance Fundamentals 2 4 s.h.**
Introduction to piping systems, basic hydraulics and pneumatics, hydraulic and pneumatic troubleshooting, rigging and equipment installation, welding principals, oxyacetylene cutting and welding. Three hours lecture, three hours lab per week.
**Prereq.:** EUT 1502 and EUT 1504, concurrent or prerequisite EUT 1503.

**EUT 2600 Electric Utility Distribution Systems 4 s.h.**
Applications of transformers, switchgear, regulators, overhead conductors and underground cable. Power factor correction, voltage regulation, coordination and overcurrent protection of distribution circuits.
**Prereq.:** EUT 1500.
EUT 2608L Advanced Power Plant Systems Lab 1 s.h.
Lab component to accompany EUT 2608. Provides hands-on activities related to on-line boiler control concepts, pollution control systems, gas turbines and diesel generators. Three hours lab per week.
Prereq.: EUT 2605, EUT 2605L.
Concurrent with: EUT 2607, EUT 2607L and EUT 2608.

Mechanical Engineering Technology

MET 1515 Mechanics I 3 s.h.
Study of forces as vector quantities; resultants of force systems; principles of mechanical equilibrium; application of principles to problems, devices and structures commonly encountered in industry. Three hours lecture per week.
Prereq.: "C" or better in ENTC 1505 and MATH 1513 or MATH 1510 and MATH 1511.

MET 2606 Solid Modeling 4 s.h.
Study of parametric solid modeling and other 3D techniques using Solid Works and Inventor software, including work with geometric dimensioning and tolerancing. Three hours lecture, three hours lab per week.
Prereq.: C or better in CCET 1505.

MET 2616 Mechanics 2 3 s.h.
Prereq.: MET 1515 "C" or better

MET 2630 Manufacturing Techniques 3 s.h.
The study of materials and processes used in manufacturing, including casting, heat treatment, hot and cold working, plastics processing and machining. Geometric Dimensioning and Tolerancing.
Prereq.: "C" or better in ENTC 1505.

MET 2630L Manufacturing Techniques Laboratory 1 s.h.
Practice and procedures of machine tool operation including lathes, drill presses, shapers, and milling machines. Two hours lab per week. "C" or better in MET 2630 or concurrent with MET 2630.

MET 3705 Thermodynamics 4 s.h.
Properties of ideal and real gases, first and second laws of thermodynamics, application to thermodynamic cycles involving power plants and cyclic machinery.
Prereq.: "C" or better in CHEM 1515 or CHEM 1505, "C" or better in EET 3725.

MET 3706 Machine Design 1 4 s.h.
Principles of stresses and deflections, shear and moment diagrams, combined stresses, fatigue, measurement of strain, and theories of failure. Application of these principles to design of machine components. Includes a capstone experience for MET AAS degrees. 4 s.h.
Prereq.: "C" or better in CCET 2604, "C" or better in CCET 1503.

MET 3707 Machine Design 2 3 s.h.
Continuation of MET 3706, progressing to the design of machine elements such as gears, belts, clutches, chains, bearings, welded and bolted joints. Two hours lecture, three hours lab per week.
Prereq.: "C" or better in MET 3706.

MET 3710 Tool Design 3 s.h.
Design and selection of cutting tools, fixtures, bending and forming dies, inspection and gauging instruments, and material feed mechanisms. Two hours lecture, three hours lab per week.
Prereq.: "C" or better in MET 3706.

MET 3711 Heat and Power Cycles 4 s.h.
A continuation of MET 3705, including the study of heat transfer, the Rankine cycle, the Otto cycle, the Diesel cycle, and the performance of pumps and heat exchangers.
Prereq.: "C" or better in MET 3714, "C" or better in MET 3705.

MET 3714 Fluid Mechanics 4 s.h.
Principles of fluid statics and fluid dynamics and their application to incompressible flow in pipes and channels; Bernoulli's equation, laminar and turbulent flow; energy and momentum in fluid flow.
Prereq.: "C" or better in MET 1515.

MET 3714L Fluid Mechanics Laboratory 1 s.h.
Experiments and applications of concepts covered in MET 3714. Three hours lab per week. Prereq.: C or better in MET 3714 or concurrent with MET 3714.

MET 3720 Mechanisms 3 s.h.
Graphical and analytical solution of problems involving displacement, velocity, and acceleration in machine mechanisms. Design of linkages with drafting software to provide required motions of machine members. Two hours lecture, three hours lab per week.
Prereq.: C or better in MET 2616, "C" or better in MATH 1570 or "C" or better in MATH 1571.

MET 3730 Energy and Financial Modeling 4 s.h.
The analysis and evaluation of financial factors that affect alternative energy systems explored in several common systems, such as solar, fuel cells, biodiesel, and wind, along with existing fuels such as coal, oil, natural gas, and nuclear.
Prereq.: MET 3705.

MET 4810 Manufacturing Systems Analysis 3 s.h.
Study of manufacturing systems including manufacturing process design, analysis, selection and sequencing; value analysis, machine tool cost and functions; computer and statistical simulation of production systems. Three hours lecture per week.
Prereq.: "C" or better in MET 3707.

MET 4812 Numerical Control 3 s.h.
A study of the programming of numerically-controlled machine tools. Students program NC machines using manual and computer-assisted techniques.
Prereq.: C or better in DDT 2606, and C or better in MET 3707.
Concurrent: MET 4812L.

MET 4812L Numerical Control Lab 1 s.h.
A study of the programming of numerically-controlled machine tools. Students program NC machines using manual and computer-assisted techniques. Three hours lab per week. Coreq. or.
Prereq.: MET 4812.

MET 4820 Machine Systems 3 s.h.
Interdisciplinary capstone course. Analysis and design of complex machine systems incorporating hydraulic and pneumatic subsystems and electrical controls, including PLCs. Comprehensive design projects. Three hours lecture per week.
Prereq.: Senior standing in MET and permission of instructor.

MET 4850 Air Conditioning Principles and Practice 3 s.h.
The practical techniques used in the design of heating, ventilating, and air conditioning systems, including load calculations, unit selection, and duct system layout. The laboratory work includes the use of design charts and manufacturer's catalogs in a project. Two hours lecture, two hours lab per week.
Prereq.: MET 3711.

MET 4860 Robotics Technology 2 s.h.
An application-oriented course on the technology and use of industrial robots, including classification, tooling, sensors, workcell design, safety, and programming.
Prereq.: "C" or better in MET 3714, Concurrent with: MET 4860L.

MET 4860L Robotics Technology Laboratory 1 s.h.
Practice in the programming and application of industrial robots and associated equipment. Construction of simulated robotic workcells using actual industrial robots, programmable controllers, sensors, and grippers. Two hours lab per week.
Prereq.: MET 3714 "C" or better.
Concurrent with: MET 4860.

MET 4870 Applied Finite Element Method 3 s.h.
Topics include trusses, frames, plane stress/strain, and 3-D structures. Three hours lecture.
Prereq.: "C" or better in MET 3707 or CCET 3709.
MET 4890  Special Topics in Mechanical Engineering Technology  1-4 s.h.
New developments in Mechanical Engineering Technology. Subject matter, special prerequisites, and credit hours to be announced in advance of each offering. May be repeated with different subject matter to a maximum of 8 s.h. Prereq.: Senior standing in MET or consent of the instructor.

Associate of Applied Science in Civil and Construction Engineering Technology

The associate degree program prepares technicians to support civil engineers in structural design, public works, construction, transportation, and environmental engineering. Graduates are hired by consulting engineers, architects, contractors, and government agencies.

Students in the Civil and Construction Engineering Technology (CCET) program may choose to complete two years of study and earn an Associate of Applied Science (AAS) degree. The AAS degree provides early access to employment in engineering support positions. Upon completion of the AAS degree, the student may continue on for the Bachelor of Science in Applied Science (BSAS) degree. This program provides additional coursework, continuing the student’s growth to that of an engineering technologist or designer. Exceptional students may be eligible for enrollment in a Master of Engineering or Master of Business Administration program.

Program Educational Objectives

Educational objectives for the civil and construction engineering technology programs have been developed by faculty and the program industrial advisory committee to support the university, college, and School of Engineering Technology missions. Graduates of the CCET associate degree program are prepared to support civil engineers in:

- structural design
- public works
- construction
- inspection
- transportation
- environmental engineering

Accreditation and Registration

The civil and construction engineering technology associate is accredited by the ETAC Accreditation Commission of ABET, http://www.abet.org.

Date of last campus visit: October, 2017
Accredited through: 2024
Next campus visit: 2023
Link to accreditation body: ABET (http://www.abet.org/)

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Total Major Credit Hours: 46 s.h.

Year 1

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Total Semester Hours 73-75

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Total Semester Hours 18
Communicate effectively in a professional environment.

• Continue growth in professional knowledge and skills.
• Achieve recognition consistent with their educational achievements.

Accreditation and Registration

The electrical engineering technology associate program is accredited by the ETAC Accreditation Commission of ABET, [http://www.abet.org/](http://www.abet.org/)

Date of last campus visit: October, 2017

Accredited through: 2024

Next campus visit: 2023


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Courses in Major:

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MATH 1513 Algebra and Transcendental Function 5
EET 1501 Circuit Theory 1 3
EET 1501L Circuit Theory 1 Lab 1
CCET 1503 CAD Technology 2
CCET 1504 Drafting and Plan Reading 2

Semester Hours 20

Spring
EET 1502 Circuit Theory 2 3
EET 1502L Circuit Theory 2 Lab 1
MATH 1570 Applied Calculus 1 4
ENGL 1550 Writing 1 3
PHIL 2626 Engineering Ethics (Arts and Humanities GER) 3

Semester Hours 14

Year 2
Fall
EET 2620 Digital Electronics 2
EET 2620L Digital Electronics Lab 1
EET 2605 Electronics 1 3
EET 2605L Electronics 1 Laboratory 1
ENGL 1551 Writing 2 3
ECON 2610 Principles 1: Microeconomics 3
CHEM 1515 General Chemistry 1 4
CHEM 1515L General Chemistry 1 Laboratory 0

Semester Hours 17

Spring
EET 3706 Electronics 2 3
EET 3706L Electronics 2 Laboratory 1
EET 3710 Electrical Machines 3
EET 3710L Electrical Machines Lab 1
EET 3735 & 3735L Microprocessor Architecture and Programming and Microprocessor Architecture and Programming Laboratory 3
PHYS 1501 Fundamentals of Physics 1 4
CMST 1545 Communication Foundations 3

Semester Hours 18

Total Semester Hours 69

PROGRAM OUTCOMES
ASSOCIATE OF APPLIED SCIENCE IN Electrical engineering technology
Graduates of the Associate Degree in Electrical Engineering Technology will possess the following competencies upon graduation:

- **Learning Outcome 1**: be able to apply principles of mathematics and applied science, to perform technical calculations and solve technical problems of the types commonly encountered in electrical engineering technology careers
- **Learning Outcome 2**: demonstrate the ability to identify, formulate, and present creative solutions to technical problems in a variety of specialty areas within the broad fields of electrical engineering technology
- **Learning Outcome 3**: be able to function competently in a laboratory setting, making measurements, operating technical equipment, critically examining experimental results, and properly reporting on experimental results, including their potential for improvement.
- **Learning Outcome 4**: be able to use modern computational tools for technical problem solving, including scientific calculators, computers, and appropriate software.
- **Learning Outcome 5**: demonstrate a broad education and knowledge of contemporary issues in a global and societal context, as necessary to develop professional and ethical responsibility, including responsibility to employers and to society at large
- **Learning Outcome 6**: recognize the need for life-long learning and possess the skills to maintain and improve technical and non-technical abilities
- **Learning Outcome 7**: demonstrate an ability to communicate and function effectively with members of multi-disciplinary teams from a variety of backgrounds.
- **Learning Outcome 8**: demonstrate an ability to utilize computer software applications used in electrical engineering technology such as CAD, spreadsheets, word processing, and basic programming

Associate of Applied Science in Mechanical Engineering Technology

The Mechanical Engineering Technology (MET) program is designed as a "two-plus-two" program. Students may earn an Associate of Applied Science degree after two years of full-time study. With this degree, they may begin a career in industry. The associate degree graduate can continue for two more years of full-time study to earn the bachelor's degree.

The associate degree program introduces the student to the principles and practices of machine design, manufacturing processes, testing, and energy conversion. Students are also given a firm foundation in communications, mathematics, and science. Upon completion of the associate degree, graduates may find employment as engineering technicians in a wide variety of industries. They assist engineers in the design, drafting, testing, and support of mechanical products or of the industrial equipment and processes used to manufacture consumer products.

Program Educational Objectives

Educational objectives for the MET programs have been developed by faculty and the program industrial advisory committee to support the university, the college, and the School of Engineering Technology missions. Graduates of the MET associate degree program function as assistants in the design, drafting, and testing of mechanical products, equipment and processes. Bachelor’s degree graduates assume greater responsibility in the design and testing of mechanical products, processes, and equipment.

During their first few years after completion of the mechanical engineering technology program at YSU, graduates will have demonstrated the ability to:

- Work competently in technical and professional careers related to the field of mechanical engineering technology.
- Communicate effectively in a professional environment.
- Continue growth in professional knowledge and skills.
- Achieve recognition and/or compensation consistent with their educational achievements.

Accreditation and Registration

The mechanical engineering technology associate program is accredited by the ETAC Accreditation Commission of ABET, [http://www.abet.org](http://www.abet.org).

Date of last campus visit: October, 2017

Accredited through: 2024

Next campus visit: 2023

Link to accreditation body: [ABET](http://www.abet.org/)

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**Total Semester Hours: 168**

**Year 2**

**Fall**
- Fall S.H.
- YSU 1500 Success Seminar 1
- ENGR 1550 Writing 1 2
- ENGR 1560 Mechanical Engineering Concepts 2
- MATH 1570 Introduction to Engineering Technology 2
- PHYS 1580 Fluid Mechanics 1 2
- ARTS & HUMANITIES GER 1 2

**Total Semester Hours: 15**

**Year 3**

**Fall**
- Fall S.H.
- ENGR 2107 Introduction to Engineering Technology 2
- ENGR 2110 Engineering Technology Concepts 4
- MATH 1570 Introduction to Engineering Technology 2
- PHYS 1580 Fluid Mechanics 1 2
- ARTS & HUMANITIES GER 1 2

**Total Semester Hours: 15**

**Associate of Technical Study in Power Plant Technology**

**Power Plant (Electrical Utilities) Technology**

This program prepares graduates to perform basic operating functions required in electric utility power plants and other related industries. Students gain knowledge in electrical theory, electrical machinery and controls, power plant operations, boiler, turbine, and generator operations, power plant instrumentation, and pollution control equipment. In addition, college writing, oral communications, and general education form an integral part of the program. Upon successful completion of the program, students are prepared for entry-level employment in the utility industry.

Students in this program are awarded academic credit for skills-related experience and training to compliment the academic coursework at YSU. Graduates of this program are awarded an Associate of Technical Studies (ATS) Degree.

**Total Semester Hours: 68**

**Spring**
- Spring S.H.
- YSU 1500 Success Seminar 1
- ENGR 1550 Writing 1 2
- ENGR 1560 Technical Skills Development 2
- ENGR 1570 Introduction to Engineering Technology 2
- YSU 1500 Power Plant Fundamentals and Power Plant Fundamentals Lab 1 5

**Total Semester Hours: 18**

**PROGRAM OUTCOMES**

ASSOCIATE OF APPLIED SCIENCE IN mechanical enginEERING TECHNOLOGY

Graduates of the Associate Degree in Mechanical Engineering Technology will possess the following competencies upon graduation:

- mastery of knowledge, skills, and tools of the discipline
- ability to apply knowledge to solve engineering problems
- ability to conduct, analyze, and interpret experiments
- ability to work effectively in teams
- ability to identify, analyze, and solve technical problems
- ability to communicate effectively
- recognition of the need to engage in lifelong learning
- ability to understand professional, ethical, social, and diversity responsibilities and diversity
- commitment to quality, timeliness, and continuous improvement

 Associate of Technical Study in Power Plant Technology

**Power Plant (Electrical Utilities) Technology**

This program prepares graduates to perform basic operating functions required in electric utility power plants and other related industries. Students gain knowledge in electrical theory, electrical machinery and controls, power plant operations, boiler, turbine, and generator operations, power plant instrumentation, and pollution control equipment. In addition, college writing, oral communications, and general education form an integral part of the program. Upon successful completion of the program, students are prepared for entry-level employment in the utility industry.

Students in this program are awarded academic credit for skills-related experience and training to compliment the academic coursework at YSU. Graduates of this program are awarded an Associate of Technical Studies (ATS) Degree.
students may be eligible for enrollment in a Master of Engineering or Master of Business Administration program.

The civil and construction engineering technology programs is based on the "two-plus-two" educational system which provides the student with the flexibility of earning an associate degree and a bachelor's degree according to his or her needs. After completing the requirements of the associate degree, the student may elect to either enter industry or, through an added two years of full-time study (averaging 17 hours per semester) or equivalent part-time study, earn the Bachelor of Science in Applied Science (BSAS).

Graduates of the BSAS degree program obtain employment as engineering technologists or engineering designers for government agencies, consulting engineers and architects, industry and manufacturing, and contractors. Because their education is more extensive, they are prepared for more responsibility and more-rapid advancement. BSAS engineers design, plan, inspect, and direct construction, production, and maintenance activities.

Based on an evaluation of their work, transfer students who have a related associate degree from a regionally accredited institution may be admitted to the bachelor's degree program at the junior level.

Program Educational Objectives
Educational objectives for the civil and construction engineering technology programs have been developed by faculty and the program industrial advisory committee to support the university, college, and School of Engineering Technology missions. Graduates of the CCET associate degree program are prepared to support civil engineers in:

- structural design
- public works
- construction
- inspection
- transportation
- environmental engineering

Bachelor's degree graduates are prepared to assist with planning, design, inspection, and direction of the construction of projects involving buildings, roads, dams, bridges, airports, and wastewater treatment facilities.

During their first few years after earning the civil and construction engineering technology degree at YSU, graduates will have demonstrated the ability to:

- Secure employment in a technical career related to their civil and construction engineering technology degree.
- Communicate effectively in a professional environment.
- Continue growth in professional knowledge and skills.
- Achieve recognition consistent with their educational achievements.

Accreditation and Registration
The civil and construction engineering technology bachelor program is accredited by the ETAC Accreditation Commission of ABET, http://www.abet.org. In most states, including Ohio, West Virginia and Pennsylvania, bachelor's degree graduates are qualified to take the Fundamentals of Engineering (FE) exam, and, with sufficient work experience, the Professional Engineers (PE) exam. Graduates are also qualified to apply to the National Institute for Certification in Engineering Technologies (NICET) for certification procedures in various specialty areas, depending on academic major and employment area.

Date of last campus visit: October, 2017
Accredited through: 2024
Next campus visit: 2023
Link to accrediting body: ABET (http://www.abet.org/)

Bachelor of Science in Applied Science in Civil and Construction Engineering Technology
Bachelor of Science in Applied Science Degree
(330) 941-3287

Students in the Civil and Construction Engineering Technology (CCET) program may choose to complete two years of study and earn an Associate of Applied Science (AAS) degree. The AAS degree provides early access to employment in engineering support positions. Upon completion of the AAS degree, the student may continue on for the Bachelor of Science in Applied Science (BSAS) degree. This program provides additional coursework, continuing the student's growth to that of an engineer or engineering designer. Exceptional

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1 Level 20 on the MPT and eligibility to take ENGL 1550 Writing 1 (i.e., completion of R&SK and ENGL 1540 Introduction to College Writing or test out) are prerequisites. ENTC 1500 Technical Skills Development is a pre- or co-requisite.

2 General Education Requirement: see "Schedule of Classes" for details.
**Bachelor of Science in Applied Science in Civil and Construction Engineering Technology**

**COURSE** | **TITLE** | **S.H.**
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**FIRST YEAR REQUIREMENT - STUDENT SUCCESS**
YSU 1500 | Success Seminar | 1-2
or SS 1500 | Strong Start Success Seminar | 1-2
or HONR 1500 | Intro to Honors | 1-2

**General Education Courses:**
MATH 1513 | Algebra and Transcendental Function | 5
MATH 1570 | Applied Calculus 1 | 4
MATH 2670 | Applied Calculus 2 | 5
ENGL 1550 | Writing 1 | 3
ENGL 1551 | Writing 2 | 3
CMST 1545 | Communication Foundations | 3
PHIL 2626 | Engineering Ethics | 3
OR
PHIL 2625 | Introduction to Professional Ethics | 3
GER SPA | 3
GER SPA | 3
GER SS | 3
GER SS | 3
GER AH | 3
CHEM 1515 | General Chemistry 1 | 4
CHEM 1515L | General Chemistry 1 Laboratory | 0
PHYS 1501 | Fundamentals of Physics 1 | 4

**Total GER Credit Hours: 49 s.h.**

**Courses in the Major:**
ENTC 1501 | Introduction to Engineering Technology | 2
ENTC 1505 | Engineering Technology Concepts | 4
CCET 1503 | CAD Technology | 2
CCET 1504 | Drafting and Plan Reading | 2
MET 1515 | Mechanics 1 | 3
CCET 2604 | Properties and Strength of Materials | 3
CCET 2614L | Materials Laboratory 1 | 2
CEEN 2610 | Surveying | 3
CEEN 2610L | Surveying Laboratory | 1
MET 2616 | Mechanics 2 | 3
CCET 2607 | Civil 3D | 3
CCET 2620 | Transportation Technology | 3
CCET 3706 | Structural Design | 4
CCET 3709 | Structural Analysis 1 | 3
CCET 3711 | Specifications and Estimating | 3
CCET 3724 | Hydraulics and Land Development | 3

**Design Elective (3 courses required):**
CCET 4812 | Concrete Design | 3
CCET 4813 | Steel Design | 3
CCET 4814 | Foundation Design | 3
CCET 4815 | Masonry Design | 3
CCET 4816 | Timber Design | 3
CCET 3705 | Computing for Technologists | 3
EET 3725 | Electromechanical Systems | 3
& 3725L | and Electromechanical Systems Lab | 3
CCET 3735 | Heavy Highway Technology | 3
CCET 3740 | Construction Management | 3
CCET 3708 | Building Information Modeling | 3

**CCET Elective (2 courses required):**
CCET 4807 | Project Planning & Scheduling | 3
CCET 4809 | Structural Analysis 2 | 3
CCET 4810 | Construction Surveying | 3
CCET 4824 | Environmental Technology | 3
CCET 4890 | Special Topics in Civil and Construction Engineering Technology | 2
ENTC 4895 | Independent Engineering Technology Project | 1
CCET 3714 | Soil Mechanics | 2
CCET 3714L | Soil Mechanics Laboratory (Technical Elective (1 courses required):) | 1

**Technical Elective (1 courses required):**
Any CCET or Design Elective

**Year 1**

**Fall** | **S.H.**
--- | ---
YSU 1500 | Success Seminar | 1
ENTC 1501 | Introduction to Engineering Technology | 2
ENTC 1505 | Engineering Technology Concepts | 4
CCET 1503 | CAD Technology | 2
CCET 1504 | Drafting and Plan Reading | 2
MATH 1513 | Algebra and Transcendental Function | 5
ENGL 1551 | Writing 2 | 3

**Semester Hours** | **19**

**Spring**

MATH 1570 | Applied Calculus 1 | 4
CCET 2604 | Hydraulics and Land Development | 3
CCET 2614L | Structural Analysis 1 | 3
CCET 2620 | Transportation Technology | 3
PHIL 2626 | Engineering Ethics (Arts & Humanities GER) | 3

**Semester Hours** | **17**

**Year 2**

**Fall**

CEEN 2610 & 2610L | Surveying and Surveying Laboratory | 4
MET 2616 | Mechanics 2 | 3
CCET 3706 | Structural Design | 3
CCET 3709 | Structural Analysis 1 | 3
CCET 3711 | Specifications and Estimating | 3
CCET 3724 | Hydraulics and Land Development | 3

**Semester Hours** | **19**

**Spring**

MATH 1570 | Applied Calculus 1 | 4
CCET 3724 | Hydraulics and Land Development | 3
CCET 3706 | Structural Design | 3
CCET 3711 | Specifications and Estimating | 3
CMST 1545 | Communication Foundations | 3

**Semester Hours** | **17**

**Year 3**

**Fall**

Design Elective | 3

CCET 3705 | Computing for Technologists | 3
MATH 2670 | Applied Calculus 2 | 5
CHEM 1515 | General Chemistry 1 | 4
### Electives

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<td>SS = Social Sciences</td>
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<tr>
<td>AH = Arts &amp; Humanities</td>
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### Spring

| CCET 4844       | Civil/Structural Facilities Design | 2 |
| EET 4810        | Electrical System Design          | 3 |
| Social & Personal Awareness GER | 3 |
| Social Science GER | 3 |
| Arts & Humanities GER | 3 |

### Semester Hours

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<td>Fall</td>
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### Total Semester Hours

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1. General Education Requirement: see "Schedule of Classes" for details.  
   SPA = Social & Personal Awareness (2 required for BSAS)  
   SS = Social Sciences (2 required for BSAS)  
   AH = Arts & Humanities (2 required for BSAS)  

2. Capstone course sequence must be taken concurrently, requires Program Coordinator approval.  
3. General Education Elective: Choose BIOL 2601 General Biology: Molecules and Cells, BIOL 2601L General Biology: Molecules and Cells Laboratory, GEOL 1505 Physical Geology, GEOL 1505L Physical Geology Laboratory, GEOL 2611 Geology for Engineers

---

**Electives**

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<tr>
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<td>CCET 4813</td>
<td>Steel Design</td>
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<td>CCET 4814</td>
<td>Foundation Design</td>
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<td>CCET 4815</td>
<td>Masonry Design</td>
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<td>CCET 4816</td>
<td>Timber Design</td>
<td>3</td>
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<tr>
<td>CCET Elective</td>
<td>Select two of the following:</td>
<td>4-6</td>
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**Program Outcomes**

**Bachelor of Science in Applied Science in Civil and Construction Engineering Technology**

Graduates of the Bachelor’s Degree in Civil and Construction Engineering Technology will possess the following competencies upon graduation:

- **Learning Outcome 1**: ability to plan, prepare, and utilize design, construction, and operations documents, such as specifications, contacts, change orders, engineering drawings, and construction schedules
- **Learning Outcome 2**: perform economic analyses and cost estimates related to design, construction, operations, and maintenance of systems related to civil and construction engineering
- **Learning Outcome 3**: ability to select appropriate construction and engineering materials/practices
- **Learning Outcome 4**: (Construction Engineering Technology) ability to apply principles of construction law and ethics
- **Learning Outcome 5**: apply basic technical concepts related to the civil and construction engineering technology field; such as hydraulics, hydrology, geotechnics, structures, material behavior, transportation systems, and water and wastewater systems
- **Learning Outcome 6**: perform standard analysis/design in at least one technical specialty within civil and construction engineering technology

---

**Bachelor of Science in Applied Science Degree**

The Electrical Engineering Technology program is based on the "two-plus-two" educational system which provides the student with the flexibility of earning an associate degree and a bachelor's degree according to his or her needs. After completing the requirements of the associate degree, the student may elect to either enter industry or, through an added two years of full-time study (averaging 17 hours per semester) or equivalent part-time study, earn the Bachelor of Science in Applied Science (BSAS).

The bachelor's degree program in electrical engineering technology prepares students for employment as engineering technologists or engineering designers. The students focus on analog and digital electronics communication systems, smart grid and power distribution, and computer networking systems. Co-op programs with various local companies enable EET students to gain experience and income during their junior and senior years. Many students work full or part-time while completing the BSAS degree taking evening classes. Students are encouraged to take the Fundamentals of Engineering (FE) exam as the first step toward professional registration.
Program Educational Objectives

Educational objectives for the electrical engineering technology programs have been developed by faculty and the program industrial advisory committee to support the university, college, and School of Engineering Technology missions. Graduates of the EET bachelor degree are prepared to assist in the design and testing of electrical systems and may function independently in some areas.

During their first few years after earning the electrical engineering technology degree at YSU, graduates will have demonstrated the ability to:

- Secure employment in a technical career related to their Electrical Engineering Technology degree.
- Communicate effectively in a professional environment.
- Continue growth in professional knowledge and skills.
- Achieve recognition consistent with their educational achievements.

Accreditation and Registration

The electrical engineering technology bachelor program is accredited by the ETAC Accreditation Commission of ABET, http://www.abet.org. In most states, including Ohio, West Virginia and Pennsylvania, bachelor’s degree graduates are qualified to take the Fundamentals of Engineering (FE) exam, and, with sufficient work experience, the Professional Engineers (PE) exam. Graduates are also qualified to apply to the National Institute for Certification in Engineering Technologies (NICET) for certification procedures in various specialty areas, depending on academic major and employment area.

Date of last campus visit: October, 2017

Accredited through: 2024

Next campus visit: 2023

Link to accrediting body: ABET (http://www.abet.org/)

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<td>or SS 1500</td>
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<tr>
<td>or HONR 1500</td>
<td>Intro to Honors</td>
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General Education Courses:

| ENGL 1550 | Writing 1                                  | 3    |
| or ENGL 1549 | Writing 1 with Support                     |      |
| ENGL 1551 | Writing 2                                  | 3    |
| CMST 1545 | Communication Foundations                 | 3    |
| MATH 1513 | Algebra and Transcendental Function       | 5    |
| ECON 2610 | Principles 1: Microeconomics              | 3    |
| PHYS 1501 | Fundamentals of Physics 1                 | 4    |
| CHEM 1515 & 1515L | General Chemistry 1 and General Chemistry 1 Laboratory | 4 |
| PHIL 2626 | Engineering Ethics                        | 3    |
| or PHIL 2625 | Introduction to Professional Ethics       |      |
| GER AH    |                                           | 3    |
| GER SS    |                                           | 3    |
| GER SPA   |                                           | 3    |

Courses in the major:

| ENTC 1501 | Introduction to Engineering Technology    | 2    |
| MATH 1570 | Applied Calculus 1                        | 4    |
| MATH 2670 | Applied Calculus 2                        | 5    |
| ENTC 1505 | Engineering Technology Concepts           | 4    |
| CCET 1503 | CAD Technology                            | 2    |

CCET 1504 Drafting and Plan Reading 2
EET 1501 Circuit Theory 1 3
EET 1501L Circuit Theory 1 Lab 1
EET 1502 Circuit Theory 2 3
EET 1502L Circuit Theory 2 Lab 1
EET 2605 Electronics 1 3
EET 2605L Electronics 1 Laboratory 1
EET 2620 Digital Electronics 2
EET 2620L Digital Electronics Lab 1
EET 3710 Electrical Machines 3
EET 3710L Electrical Machines Lab 1
EET 3712 Programmable Logic Controllers 3
EET 3712L PLC Laboratory 1
EET 3715 Industrial Instrumentation and Control 3.0
EET 3735 Microprocessor Architecture and Programming 3
EET 3735L Microprocessor Architecture and Programming Laboratory 0
PHYS 1501 Fundamentals of Physics 1 4
EET 3700 Methods in Circuit Analysis 3
EET 3745 Microprocessor Systems 2 3
EET 3745L Microprocessor Systems 2 Lab 0
EET 3701 Transform Circuit Analysis 3
CCET 3705 Computing for Technologists 3
EET 3760L Variable Speed Drives Lab 0
EET 3760 Variable Speed Drives 3
EET 4810 Electrical System Design 3
EET 4812 Automation Systems Integration 3.0
EET 4870 Process Control Technology 4
ENGL 3743 Professional and Technical Writing 3

Technical Elective: Select 3 hours 3
EET 2653 Fiber Optics
MET 3705 Thermodynamics
ISEN 3710 Engineering Statistics
ISEN 3724 Engineering Economy
MET 4860 Robotics Technology
MET 4860L Robotics Technology Laboratory

EET Elective 37XX/48XX: Select 6 hours 6
EET 3706 Electronics 2
EET 3706L Electronics 2 Laboratory
EET 3730 Logic Systems Design
EET 3730L Logic Systems Design Lab
EET 3780 Communication Systems
EET 3780L Communication Systems Lab
EET 4815 Power System Studies
EET 4817
EET 4820 Power System Protection and Control
EET 4820L Power System Protection and Control Lab
EET 4845 Microprocessor Systems 3
EET 4845L Microprocessor Systems 3 Lab
EET 4850 Integrated Circuit Applications
EET 4850L Integrated Circuit Applications Lab
EET 4890 Special Topics in EET
EET 48XX

Total Semester Hours 130-132
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| Year | Spring | |
|------|--------|
| 1 | EET 1502 | Circuit Theory 2 | 3 |
| | EET 1502L | Circuit Theory 2 Lab | 1 |
| | EET 2620 | Digital Electronics | 2 |
| | EET 2620L | Digital Electronics Lab | 1 |
| | MATH 1570 | Applied Calculus 1 | 4 |
| | ENGL 1550 | Writing 1 | 3-4 |
| | or ENGL 1549 | or Writing 1 with Support | |
| | PHYS 1501 | Fundamentals of Physics 1 | 4 |
| | **Semester Hours** | **18-19** |

| Year | Fall | |
|------|------|
| 2 | EET 2605 | Electronics 1 | 3 |
| | EET 2605L | Electronics 1 Laboratory | 1 |
| | EET 3710 | Electrical Machines | 3 |
| | EET 3710L | Electrical Machines Lab | 1 |
| | ENGL 1551 | Writing 2 | 3 |
| | CHEM 1515 | General Chemistry 1 | 4 |
| | & 1515L | General Chemistry 1 Laboratory | 0 |
| | **Semester Hours** | **15** |

| Year | Spring | |
|------|--------|
| 2 | EET 3715 | Industrial Instrumentation and Control | 3.0 |
| | EET 3712 | Programmable Logic Controllers | 3 |
| | EET 3712L | PLC Laboratory | 1 |
| | ECON 2610 | Principles 1: Microeconomics | 3 |
| | PHIL 2625 | Introduction to Professional Ethics | 3 |
| | CMST 1545 | Communication Foundations | 3 |
| | **Semester Hours** | **16** |

| Year | Fall | |
|------|------|
| 3 | MATH 2670 | Applied Calculus 2 | 5 |
| | EET 3735 | Microprocessor Architecture and Programming | 3 |
| | EET 3735L | Microprocessor Architecture and Programming Laboratory | 0 |
| | EET 3700 | Methods in Circuit Analysis | 3 |
| | CSIS 2610 | Programming and Problem-Solving | 4 |
| | ENGL 3743 | Professional and Technical Writing | 3 |
| | **Semester Hours** | **18** |

| Year | Spring | |
|------|--------|
| 3 | EET 3701 | Transform Circuit Analysis | 3 |
| | EET 3760 | Variable Speed Drives & 3760L | 3 |
| | EET 3745 | Microprocessor Systems 2 | 3 |
| | EET 3745L | Microprocessor Systems 2 Lab | 0 |

| Year | Fall | |
|------|------|
| 4 | EET 4812 | Automation Systems Integration | 3.0 |
| | EET 4810 | Electrical System Design | 3 |
| | EET Elective | 2 |
| | CCET 3705 | Computing for Technologists | 3 |
| | Social & Personal Awareness GER | 1 |
| | **Semester Hours** | **15** |

| Year | Spring | |
|------|--------|
| 4 | EET 4870 | Process Control Technology | 4 |
| | EET Elective | 2 |
| | Arts & Humanities GER | 1 |
| | Social & Personal Awareness GER | 1 |
| | **Semester Hours** | **13** |

| Total Semester Hours | 130-131 |

---

1 General Education Requirement:
- SPA = Social & Personal Awareness (2 required for BSAS)
- SS = Social Science (2 required for BSAS)
- AH = Arts & Humanities (2 required for BSAS)
2 EET Electives: 3706/L, 3780/L, 3730/L, 4811, 4817, 4820, 4845, 4850/L, 48XX (Special Topics)
- Technical Electives: ISEN 3720, ISEN 3724, MET 3705, MET 4860/L, CSIS 2650, EET 2653/L

**program outcomes**

**BACHELOR OF SCIENCE IN APPLIED SCIENCE** in Electrical engineering technology

Graduates of the Bachelor’s Degree in Electrical Engineering Technology will possess the following competencies upon graduation:

- **Learning Outcome 1**: be able to apply principles of mathematics and applied science, to perform technical calculations and solve technical problems of the types commonly encountered in electrical engineering technology careers.
- **Learning Outcome 2**: demonstrate the ability to identify, formulate, and present creative solutions to technical problems in a variety of specialty areas within the broad fields of electrical engineering technology.
- **Learning Outcome 3**: be able to function competently in a laboratory setting, making measurements, operating technical equipment, critically examining experimental results, and properly reporting on experimental results, including their potential for improvement.
- **Learning Outcome 4**: be able to use modern computational tools for technical problem solving, including scientific calculators, computers, and appropriate software.
- **Learning Outcome 5**: demonstrate a broad education and knowledge of contemporary issues in a global and societal context, as necessary to develop professional and ethical responsibility, including responsibility to employers and to society at large.
- **Learning Outcome 6**: recognize the need for life-long learning and possess the skills to maintain and improve technical and non-technical abilities.
- **Learning Outcome 7**: demonstrate an ability to communicate and function effectively with members of multi-disciplinary teams from a variety of backgrounds.
- **Learning Outcome 8**: the ability to identify, formulate, and solve engineering problems in the following major electrical engineering technology disciplines: analog and digital electronics, communication systems, power, aerospace and computer systems.
Bachelor of Science in Applied Science in Mechanical Engineering Technology

Students who have earned the associate degree may elect to complete the bachelor's degree on either a full- or part-time basis. Courses in the bachelor's degree program further develop technical, communication, and managerial skills. Upon successful completion of the coursework, graduates are awarded the Bachelor of Science in Applied Science degree and are prepared for greater levels of responsibility and greater career advancement.

Graduates of the BSAS degree program obtain employment as engineers or engineering designers for government agencies, consulting engineers and architects, industry and manufacturing, and contractors. Because their education is more extensive, they are prepared for more responsibility and more-rapid advancement. BSAS engineers and designers plan, design, and inspect production and maintenance activities.

Based on an evaluation of their work, transfer students who have a related associate degree from a regionally accredited institution may be admitted to the bachelor's degree program at the junior level.

program Educational Objectives

Educational objectives for the mechanical engineering technology programs have been developed by faculty and the program industrial advisory committee to support the university, the college, and the School of Engineering Technology missions. Graduates of the MET associate degree program function as assistants in the design, drafting and testing of mechanical products, equipment and processes. Bachelor's degree graduates assume greater responsibility in the design and testing of mechanical products, processes, and equipment.

During their first few years after completion of the mechanical engineering technology program at YSU, graduates will have demonstrated the ability to:

- Work competently in technical and professional careers related to the field of mechanical engineering technology, with a path to the BSAS degree.
- Communicate effectively in a professional environment.
- Continue growth in professional knowledge and skills.
- Achieve recognition and/or compensation consistent with their educational achievements.

Accreditation and Registration

The mechanical engineering technology bachelor program is accredited by the ETAC Accreditation Commission of ABET, http://www.abet.org. In most states, including Ohio, West Virginia and Pennsylvania, bachelor's degree graduates are qualified to take the Fundamentals of Engineering (FE) exam, and, with sufficient work experience, the Professional Engineers (PE) exam. Graduates are also qualified to apply to the National Institute for Certification in Engineering Technologies (NICET) for certification procedures in various specialty areas, depending on academic major and employment area.

Date of last campus visit: October, 2017
Accredited through: 2024
Next campus visit: 2023
Link to accrediting body: ABET (http://www.abet.org/

Course Title

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ENTC 4895  Independent Engineering Technology Project
ISEN/MGT Elective: Select 3 hours from list below 3
ISEN 3720  Statistical Quality Control
MGT 3725  Fundamentals of Management
MGT 2604  Legal Environment of Business 1
ENT 3700  Entrepreneurship New Venture Creation

Total Semester Hours 130-132

Year 1
Fall
YSU 1500  Success Seminar 1
ENTC 1501  Introduction to Engineering Technology 2
ENTC 1505  Engineering Technology Concepts 4
MATH 1513  Algebra and Transcendental Function 5
ENGL 1550  Writing 1 3-4
or ENGL 1549 or Writing 1 with Support
CCET 1503  CAD Technology 2
CCET 1504  Drafting and Plan Reading 2

Semester Hours 19-20

Spring
MET 1515  Mechanics 1 3
CCET 2604  Properties and Strength of Materials 3
CCET 2614L Materials Laboratory 1 2
MATH 1570  Applied Calculus 1 4
MET 2606  Solid Modeling 4

Semester Hours 16

Year 2
Fall
MET 2616  Mechanics 2 3
MET 3714  Fluid Mechanics 5
& 3714L and Fluid Mechanics Laboratory
PHYS 1501  Fundamentals of Physics 1 4
Arts & Humanities GER 3 3

Semester Hours 15

Spring
MET 2630  Manufacturing Techniques 4
& 2630L and Manufacturing Techniques Laboratory
MET 3706  Machine Design 1 4
CHEM 1515  General Chemistry 1 4
& 1515L and General Chemistry Laboratory
ENGL 1551  Writing 2 3
Social Science GER 3 3

Semester Hours 18

Year 3
Fall
MET 3720  Mechanisms 3
MET 3707  Machine Design 2 3
EET 3725  Electromechanical Systems 4
& 3725L and Electromechanical Systems Lab
MATH 2670  Applied Calculus 2 5

Semester Hours 15

Spring
MET 3705  Thermodynamics 4
CCET 3705  Computing for Technologists 3
MET 4860  Robotics Technology 3
& 4860L and Robotics Technology Laboratory
CMST 1545  Communication Foundations 3

MET Elective 1 3

Semester Hours 16

Year 4
Fall
MET 3711  Heat and Power Cycles 4
MET 4810  Manufacturing Systems Analysis 3
MET Elective 1 3
Social Science GER 3 3
Arts and Humanities GER 3 3

Semester Hours 16

Spring
MET 4820  Machine Systems (Capstone) 3
MET 4870  Applied Finite Element Method 3
Social & Personal Awareness GER 3 3
Social & Personal Awareness GER 3 3
ISEN/MGT Elective 2 3

Semester Hours 15

Total Semester Hours 130-131

1 Choose two of MET 3710 Tool Design, MET 4812 Numerical Control/MET 4812L Numerical Control Lab, MET 4890 Special Topics in Mechanical Engineering Technology, EET 4880 Electrical and Mechanical Facilities Design, ENTC 4895 Independent Engineering Technology Project
2 Choose one ISEN 3720 Statistical Quality Control, ISEN 3724 Engineering Economy, MGT 3725 Fundamentals of Management, or MGT 2604 Legal Environment of Business 1
3 General Education Requirement: see "Schedule of Classes" for details

SPA = Social & Personal Awareness (2 required for BSAS)
SS = Social Sciences (2 required for BSAS)
AH = Arts & Humanities (2 required for BSAS)

Electives

COURSE  TITLE  S.H.
MET Electives
Select two of the following: 2-8
MET 3710  Tool Design
MET 4812  Numerical Control
& 4812L and Numerical Control Lab
MET 4890  Special Topics in Mechanical Engineering Technology
EET 4880  Electrical and Mechanical Facilities Design
ENTC 4895  Independent Engineering Technology Project
ISEN/MGT Electives
Select one of the following: 3
ISEN 3720  Statistical Quality Control
ISEN 3724  Engineering Economy
MGT 3725  Fundamentals of Management
MGT 2604  Legal Environment of Business 1

Total Semester Hours 5-11

PROGRAM OUTCOMES

BACHELOR OF SCIENCE IN APPLIED SCIENCE IN MECHANICAL ENGINEERING TECHNOLOGY

Graduates of the Bachelor’s Degree in Mechanical Engineering Technology will possess the following competencies upon graduation:

• mastery of knowledge, skills, and tools of the discipline
• ability to apply knowledge to solve engineering problems
• ability to conduct, analyze, and interpret experiments
• ability to be creative in design
• ability to work effectively in teams
• ability to identify, analyze, and solve technical problems
• ability to communicate effectively
• recognition of the need to engage in lifelong learning
• ability to understand professional, ethical, and social responsibilities
• respect for diversity, professional, societal, and global issues
• commitment to quality, timeliness, and continuous improvement

Minor in Electrical Engineering Technology

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>EET 1501 &amp; 1501L</td>
<td>Circuit Theory 1 and Circuit Theory 1 Lab</td>
<td>4</td>
</tr>
<tr>
<td>EET 1502 &amp; 1502L</td>
<td>Circuit Theory 2 and Circuit Theory 2 Lab</td>
<td>4</td>
</tr>
<tr>
<td>EET 2605 &amp; 2650L</td>
<td>Electronics 1 and Electronics 1 Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>EET 2620 &amp; 2620L</td>
<td>Digital Electronics and Digital Electronics Lab</td>
<td>3</td>
</tr>
<tr>
<td>EET 3710 &amp; 3710L</td>
<td>Electrical Machines and Electrical Machines Lab</td>
<td>4</td>
</tr>
<tr>
<td>EET 3712 &amp; 3712L</td>
<td>Programmable Logic Controllers and PLC Laboratory</td>
<td>4</td>
</tr>
</tbody>
</table>

Total Semester Hours 23

Department of Mathematics and Statistics

501 Lincoln Building (330) 941-3302

If you are attempting to register for a mathematics course and receive a registration error, please complete the Math Department Override Request Form (https://forms.office.com/Pages/ResponsePage.aspx?id=F4pyOaeXSU-MmyecGkA4wJQnJL4wz7RlJtBDy9f8B1-JUNVIIMVJKWTVBUIZHMO1aMk0OFcwOTRGRI4u). Please contact the Department of Mathematics and Statistics at (330) 941-3302 with any questions. Please visit the "Placements and Pathways" tab for more information about mathematics placement.

Students may select mathematics as their major for the following degree programs:

• Bachelor of Science (BS)
• Bachelor of Science in Education (BSEd)

In addition to satisfying general University requirements, all students majoring in mathematics must complete the following core courses:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
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</thead>
<tbody>
<tr>
<td>MATH 1571</td>
<td>Calculus 1</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1572</td>
<td>Calculus 2</td>
<td>4</td>
</tr>
<tr>
<td>MATH 2673</td>
<td>Calculus 3</td>
<td>4</td>
</tr>
<tr>
<td>MATH 3715</td>
<td>Discrete Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 3720</td>
<td>Linear Algebra and Matrix Theory</td>
<td>3</td>
</tr>
<tr>
<td>MATH 3721</td>
<td>Abstract Algebra 1</td>
<td>4</td>
</tr>
<tr>
<td>MATH 3751</td>
<td>Real Analysis 1</td>
<td>4</td>
</tr>
<tr>
<td>STAT 3743</td>
<td>Probability and Statistics</td>
<td>4</td>
</tr>
<tr>
<td>CSIS 2610</td>
<td>Programming and Problem-Solving</td>
<td>4</td>
</tr>
</tbody>
</table>

Intermediate-level (2600) proficiency in a foreign language
Select one of the following:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 4896</td>
<td>Senior Undergraduate Research Project</td>
</tr>
<tr>
<td>MATH 4897H</td>
<td>Thesis</td>
</tr>
<tr>
<td>STEM 4890</td>
<td>STEM Internship</td>
</tr>
</tbody>
</table>

In addition, students must complete 12 additional semester hours in mathematics or statistics at the 3700-level or above, with at least two courses chosen from the 4800-level. The total number of hours of mathematics is 40 semester hours.

In selecting appropriate courses, the student should consult a department advisor, since certain courses are recommended according to whether the student plans for graduate study in mathematics or statistics, secondary school teaching, or a career in business, industry, or government. The following courses are recommended based upon the student’s interest and career goals:

Traditional Mathematics

In addition to the core, students seeking classical training in mathematics are recommended to take MATH 4822, MATH 4880, MATH 5852 and one additional 4800-level course in mathematics. The minor course of study may be any discipline. Suggested minors include biology, chemistry, computer science, economics, geology, physics, psychology, one engineering specialty (from chemical, civil, electrical, industrial, mechanical), or statistics. Students will study the nature of mathematics in fields such as algebra, real analysis, complex analysis, and topology. Connections to, and generalizations of, earlier formulations of mathematical concepts will constantly occur. Generally, new results in mathematics are developed and proven by those with a Ph.D. in mathematics. Students planning to pursue a Ph.D. will be well prepared for graduate school with these courses.

Applied Mathematics

Applied mathematics courses emphasize areas of mathematics used in government and industry. Students learn mathematical models for the study of physical and computational processes. Mathematical techniques are also used to study uncertainty, scheduling, and decision theory. Many graduates find employment in consulting firms and large corporations where computing and mathematical problem solving skills are valued. Students are also prepared to pursue a master’s degree in applied mathematics.

In addition to the core, students interested in applied mathematics are recommended to take MATH 3705, 3745, 4855, 5825, 5835, 5845, or 5860 and complete a recognized minor in any discipline. Suggested minors include statistics, computer science, engineering, physics, geology, chemistry, biology, logistics, or economics.

Statistics

Statistical techniques are utilized in many fields of research such as medicine, biology, business, and sociology. Statisticians learn proper methodology for collecting, summarizing, and interpreting data subject to sampling variability. The increase in affordable computing and the ease of statistical software have placed statistical expertise in demand. Generally, students interested in statistics pursue further study at the graduate level, but positions are available for students upon completion of a bachelor’s degree.

In addition to the core, students interested in statistics are recommended to fulfill their upper-level course requirements with statistics courses and complete a minor in statistics.

Actuarial Mathematics

Students interested in using mathematics and statistics to quantify risk and develop models to better predict and study risk should consider actuarial mathematics. Actuaries work for insurance companies, investment and consulting firms, as well as the government and seek ways to manage risk and avoid potential exposure to excessive risk. Actuaries assess pension plans, mortality rates, and accident rates. Students will study the mathematical and
statistical foundations of actuarial models as they prepare for the examination sequence to become a licensed actuary.

In addition to the core, students interested in actuarial mathematics are recommended to take STAT 5800, STAT 4804, STAT 4844, STAT 4888, and STAT 5802 and complete a minor in actuarial science.

**Accelerated 4+1 Program**

Undergraduate students can apply for admission into the accelerated program for the MS in Mathematics after completing 78 undergraduate semester hours with a GPA of 3.3 or higher. After being admitted to the accelerated MS program, students can take a maximum of nine semester hours of graduate coursework that can count toward both a bachelor’s and master’s degree from the Department of Mathematics and Statistics. The courses chosen to count for both undergraduate and graduate coursework must be approved by the Graduate Executive Committee within the Department upon admission into the program. An additional six hours of graduate coursework can be completed as an undergraduate and used exclusively for graduate credit. This allows the student to graduate with a master’s degree with one year of additional full-time study beyond the bachelor’s degree.

**Chair**

Thomas P. Wakefield, Ph.D., Professor, Chair

**Professor**

Alexis Byers, Ph.D., Assistant Professor

Guang-Hwa (Andy) Chang, Ph.D., Professor

Neil Flowers, Ph.D., Assistant Professor

Richard G. Goldthwait, Ph.D., Assistant Professor

Jozsi Z. Jalic, Ph.D., Professor

G. Jay Kerns, Ph.D., Professor

Lucy Xiaoqing Kerns, Ph.D., Associate Professor

Thomas L. Madsen, Ph.D., Associate Professor

Nguyen Thi Nguyen, Ph.D., Associate Professor

Anita C. O'Mellan, Ph.D., Professor

Alicia Prieto Langarica, Ph.D., Professor

Stephen Rodabaugh, Ph.D., Professor

Thomas Smotzer, Ph.D., Professor

Jamal K. Tartir, Ph.D., Professor

Padraic ("Paddy") W. Taylor, Ph.D., Associate Professor

Eric J. Wingler, Ph.D., Professor

**Lecturer**

Lori A. Carlson, M.S., Senior Lecturer

Emily Dolsak, M.S., Lecturer

Sepideh Khavari, M.S., Lecturer

Alayne Leone, M.S., Lecturer

**Minors**

- Mathematics Minor (p. 488)
- Statistics Minor (p. 488)
- Biomathematics Minor (p. 488)
- Actuarial Science Minor (p. 488)

**Mathematics**

**MATH 1500 Mathematics Preparation for Algebra Placement 2 s.h.**

This course is for students in the algebra pathway (mainly pre-STEM and pre-business) who wish to improve their mathematics placement and skills in desired areas of mathematics. Topics covered are uniquely determined by the student's initial placement assessment. Does not count toward the degree. May be repeated. Grading is ABC/NC.

**MATH 1510 College Algebra 4 s.h.**

This course is primarily intended to prepare STEM students (along with MATH 1111) for MATH 1570 or 1571 and business students for MATH 1552. Topics include real numbers, equations and inequalities, linear, quadratic, polynomial, exponential, and logarithmic functions, graphing techniques, systems of equations, and applications. The course fulfills the general education requirements for mathematics.

**Prereq.:** at least Level 30 on the Mathematics Placement Test or Level 20 on Mathematics Placement Test and concurrent enrollment in MATH 1510C.

**Gen Ed:** Mathematics.

**MATH 1510C Corequisite Support for College Algebra 2 s.h.**

This course is intended to provide corequisite support for students requiring remediation in mathematics while they are enrolled in MATH 1510 (College Algebra). Emphasis will be placed on prerequisite skills needed for college algebra as well as just in time review through the use of appropriate technology. Does not count toward a degree.

**Prereq.:** Mathematics placement Level 20 and enrollment in MATH 1510.

**MATH 1511 Trigonometry 3 s.h.**

This course, along with MATH 1510 is primarily intended to prepare STEM students for MATH 1570 or MATH 1571. Topics include algebraic structure and graphs of trigonometric functions and inverse trigonometric functions, angle measurements, similar triangles, trigonometric identities, vectors, complex numbers, polar coordinates and solving trigonometric equations with applications.

**Prereq.:** Math Placement Level 35 or Math Placement Test Level 20 with successful completion of MATH 1510 and MATH 1510C and enrollment in MATH 1511.

**Gen Ed:** Mathematics.

**MATH 1511C Corequisite Support for Trigonometry 1 s.h.**

This course is intended to provide corequisite support for students requiring remediation in mathematics while they are enrolled in MATH 1511 (Trigonometry). Emphasis will be placed on prerequisite skills needed for trigonometry as well as just in time review through the use of appropriate technology. Does not count toward a degree.

**Prereq.:** Math Placement Test Level 20 with successful completion of MATH 1510 and MATH 1510C and enrollment in MATH 1511.

**MATH 1513 Algebra and Transcendental Function 5 s.h.**

Function concepts including trigonometric, exponential, and logarithmic functions. Application problems and graphing. Supplemental topics.

**Prereq.:** Math Placement Level 45 or higher.

**Gen Ed:** Mathematics.

**MATH 1552 Applied Mathematics for Management 4 s.h.**

Apply functions, linear systems, linear programming to business including use of technology; mathematics of finance and an introduction to limits, derivatives and integrals with business applications. No credit for students who have completed MATH 1570 or MATH 1571.

**Prereq.:** MATH 1510 with grade of “C” or better or at least Level 45 on the Mathematics Placement Test.

**Gen Ed:** Mathematics.
MATH 1564 Foundations of Middle School Mathematics 1 4 s.h.
Conceptual foundations of topics from number theory, operations, functions, algebra, and data analysis. Emphasis on multiple approaches and representations, problem solving, and communication of mathematical reasoning. Includes inquiry-based experiences with manipulatives and computing technology.
Prereq.: Level 35 on the Mathematics Placement Test.

MATH 1570 Applied Calculus 1 4 s.h.
The elements of differential and integral calculus, with emphasis on applications. Analytical geometry, differentiation and integration techniques and series representations. Introduction to differential equations, transform calculus, and Fourier analysis. This is a basic methods course particularly adapted for those who require applied topics in mathematics. Not applicable toward the Mathematics major. Credit will not be given for both MATH 1552 and MATH 1570.
Prereq.: MATH 1513, or MATH 1510 and MATH 1511 grade of “C” or better, or at least Level 70 on the Mathematics Placement Test.
Gen Ed: Mathematics.

MATH 1571 Calculus 1 4 s.h.
A sequence of integrated courses in analytic geometry and calculus. A detailed study of limits, derivatives, and integrals of functions of one and several variables with applications.
Prereq.: MATH 1513, minimum grade of “C”, or MATH 1510 and MATH 1511, minimum grade of “C” in both courses, or at least Level 70 on the Mathematics Placement Test.
Gen Ed: Mathematics.

MATH 1571H Honors Calculus 1 4 s.h.
A sequence of integrated courses in analytic geometry and calculus. A detailed study of limits, derivatives, and integrals of functions of one and several variables with applications.
Prereq.: MATH 1513, minimum grade of “C”, or MATH 1510 and MATH 1511, minimum grade of “C” in both courses, or at least Level 70 on the Mathematics Placement Test.
Gen Ed: Mathematics.

MATH 1572 Calculus 2 4 s.h.
A sequence of integrated courses in analytic geometry and calculus. A detailed study of limits, derivatives, and integrals of functions of one and several variables with applications.
Prereq.: C or better in MATH 1571, 1571H, or 1581H.
Gen Ed: Mathematics.

MATH 1572H Honors Calculus 2 4 s.h.
A sequence of integrated courses in analytic geometry and calculus. A detailed study of limits, derivatives, and integrals of functions of one and several variables with applications.
Prereq.: MATH 1571 OR MATH 1581H grade of “C” or better.
Gen Ed: Mathematics.

MATH 1580H Honors Biomathematics 1 2 s.h.
Counting techniques, probability, matrices and linear systems. Emphasis on the role of mathematical models in explaining and predicting phenomena in life sciences.
Prereq.: Admission to NEOMED-YSU program.

MATH 1581H Honors Biomathematics 2 4 s.h.
Limits, derivatives, integrals; emphasizes theory, proofs, nonlinear epistomologies, medical/health applications. Rigorously develops logarithmic/exponential functions. Major projects applying differential equations to medicine. Credit can be given for both MATH 1571 and MATH 1581H if taken in that order; MATH 1581H can be prerequisite for MATH 1572.
Prereq.: Admission to YSU-BaccMed program.
Gen Ed: Mathematics.

MATH 1585H Honors Accelerated Calculus 1 5 s.h.
A sequence of honors courses in analytical geometry and calculus which cover essentially the same material as MATH 1571, 1572, 2673, in two semesters instead of three. A detailed study of limits, derivatives, and integrals of functions of one and several variables and their applications. This sequence will be offered at most once during each academic year.
Prereq.: ACT math subscore of 32, AP Calculus score of 4 or higher, or at least one unit of high school calculus with a score of 28 or higher on placement exam or instructor permission.
Gen Ed: Mathematics.

MATH 1586H Honors Calculus Laboratory 1 1 s.h.
Introduction to mathematical modeling of topics covered in calculus. Emphasizes the use of technology such as computer algebra systems, technical document processing, and graphics software for solving problems and reporting solutions.
Prereq.: MATH 1571 or concurrent with 1585H.

MATH 2623 Quantitative Reasoning 3 s.h.
Mathematics models emphasizing basic ideas in mathematics and statistics, stressing concept formation rather than manipulative skills.
Prereq.: At least Mathematics Placement Level 15 or Mathematics Placement Level 10 and enrollment in Math 2623C.
Gen Ed: Mathematics.

MATH 2623C Corequisite Support for Quantitative Reasoning 2 s.h.
This course is intended to provide corequisite support for students requiring remediation in mathematics while they are concurrently enrolled in MATH 2623 (Quantitative Reasoning). Emphasis will be placed on prerequisite skills needed for MATH 2623 as well as just in time review through the use of appropriate technology. Does not count toward a degree.
Prereq.: Mathematics Placement Level 10 and enrollment in MATH 2623.

MATH 2623H Honors Quantitative Reasoning 3 s.h.
Mathematics models emphasizing basic ideas in mathematics and statistics, stressing concept formation rather than manipulative skills.
Prereq.: at least Level 20 on the Mathematics Placement Test or Level 10 on Mathematics Placement Test and concurrent enrollment in MATH 2623C.
Gen Ed: Mathematics.

MATH 2651 Mathematics for Early Childhood Teachers 1 3 s.h.
A conceptual development of mathematics topics underlying today’s Pre-K-grade 3 curriculum. Emphasis on multiple approaches, problem solving, and communication of mathematics. Incorporates classroom activities, manipulatives, technology, and activities developmentally appropriate for young children.
Prereq.: At least Mathematics Placement Level 15 or Mathematics Placement Level 10 and enrollment in MATH 2651C.

MATH 2651C Corequisite Support for Mathematics for Early Childhood Teachers 3 s.h.
This course is intended to provide corequisite support for students requiring remediation in mathematics while they are concurrently enrolled in MATH 2651. Emphasis will be placed on prerequisite skills needed for Algebra, Number and Operations, and Quantity topics as well as just in time review through the use of appropriate technology. Does not count toward a degree.
Prereq.: Level 10 Mathematics Placement and enrollment in MATH 2651C.

MATH 2652 Mathematics for Early Childhood Teachers 2 3 s.h.
A conceptual development of mathematics topics underlying today’s Pre-K-grade 3 curriculum. Emphasis on multiple approaches, problem solving, and communication of mathematics. Incorporates classroom activities, manipulatives, technology, and activities developmentally appropriate for young children.
Prereq.: MATH 2651.
Gen Ed: Mathematics.
MATH 2661 Mathematics for Elementary Teachers 1 4 s.h.  
A conceptual development of mathematics topics underlying today’s Pre-K-grade 5 curriculum (Number, Operations, and Algebraic Thinking). Emphasis on multiple approaches, problem solving, and communication of mathematics. Incorporates manipulatives, technology, and classroom activities developmentally appropriate for early and elementary children.  
Prereq.: At least Level 15 on the Mathematics Placement Test or Level 10 on the Mathematics Placement Test and enrollment in MATH 2661C.  

MATH 2661C Co-requisite Support for Mathematics for Elementary Teachers 1 3 s.h.  
This course is intended to provide corequisite support for students requiring remediation in mathematics while they are concurrently enrolled in MATH 2661. Emphasis will be placed on prerequisite skills needed for Algebra, Number and Operations, and Quantity topics as well as just in time review through the use of appropriate technology.  
Prereq.: enrollment in MATH 2661.  

MATH 2662 Mathematics for Elementary Teachers 2 4 s.h.  
Prereq.: MATH 2661.  
Gen Ed: Mathematics.  

MATH 2665 Foundations of Middle School Mathematics 2 4 s.h.  
Emphasis on multiple approaches and representations, problem solving, and communication of mathematical reasoning. Includes inquiry-based experiences with manipulatives and computing technology.  
Prereq.: Level 35 on the Mathematics Placement Test.  
Gen Ed: Mathematics.  

MATH 2670 Applied Calculus 2 5 s.h.  
The elements of differential and integral calculus, with emphasis on applications. Analytical geometry, differentiation and integration techniques and series representations. Introduction to differential equations, transform calculus, and Fourier analysis. This is a basic methods course particularly adapted for those who require applied topics in mathematics. Not applicable toward the Mathematics major.  
Prereq.: MATH 1570 grade of “C” or better.  
Gen Ed: Mathematics.  

MATH 2673 Calculus 3 4 s.h.  
A sequence of integrated courses in analytic geometry and calculus. A detailed study of limits, derivatives, and integrals of functions of one and several variables with applications.  
Prereq.: MATH 1572 with a “C” or better.  

MATH 2673H Honors Calculus 3 4 s.h.  
A sequence of integrated courses in analytic geometry and calculus. A detailed study of limits, derivatives, and integrals of functions of one and several variables with applications.  
Prereq.: MATH 1572 with a “C” or better.  

MATH 2686H Honors Accelerated Calculus 2 5 s.h.  
A sequence of honors courses in analytical geometry and calculus which cover essentially the same material as MATH 1571, 1572, 2673, in two semesters instead of three. A detailed study of limits, derivatives, and integrals of functions of one and several variables and their applications. This sequence will be offered at most once during each academic year.  
Prereq.: “C” or better in MATH 1585H.  
Gen Ed: Mathematics.  

MATH 2687H Honors Calculus Laboratory 2 1 s.h.  
Introduction to mathematical modeling of topics covered in calculus. Emphasizes the use of technology such as computer algebra systems, technical document processing, and graphics software for solving problems and reporting solutions.  
Prereq.: MATH 1572 or concurrent with MATH 1572H or 1586H.  

MATH 3702 Problem Solving Seminar for Secondary Mathematics 3 s.h.  
Approaches to and practice with problem solving with examples from a broad spectrum of mathematics. Emphases include problems at the level of the Ohio Assessment for Educators (OAE) examination for integrated mathematics and problems suitable for high school contests. Not applicable to the mathematics major or minor.  
Prereq.: Limited to BCOE majors with MATH 1572, 1572H or MATH 1585H or consent of instructor.  

MATH 3705 Differential Equations 3 s.h.  
Prereq.: C or better in one of MATH 2673, MATH 2673H, or MATH 2686H.  

MATH 3705H Honors Differential Equations 3 s.h.  
Prereq.: MATH 2673 grade of “C” or better.  

MATH 3715 Discrete Mathematics 3 s.h.  
A course in discrete mathematical structures to prepare students for advanced courses. Topics include set theory, functions and relations, logic and quantifiers, truth tables and Boolean expressions, induction and other techniques of proof, and graphs. Credit will not be given for both CSCI 3710 and MATH 3715.  
Prereq.: MATH 1572 or MATH 1585H.  

MATH 3718 Linear Algebra and Discrete Mathematics for Engineers 3 s.h.  
This introduction to linear algebra and discrete mathematics covers the following topics: systems of linear equations, logic and proof, matrix algebra, determinants, vector spaces, eigenvalues and eigenvectors, set theory, and counting. The course does not count toward the mathematics major. Credit will not be given for MATH 3718 and both MATH 3715 and MATH 3720.  
Prereq.: “C” or better in MATH 1572.  

MATH 3720 Linear Algebra and Matrix Theory 3 s.h.  
Matrices; matrix operations; linear transformations; applications.  
Prereq.: MATH 1572 or MATH 1585H.  

MATH 3721 Abstract Algebra 1 4 s.h.  
Introduction to abstract algebra investigating fundamental concepts in group and ring theory. Topics include groups, subgroups, cyclic groups, permutation groups, cosets, direct products, homomorphisms, factor groups, rings, integral domains and polynomial rings.  
Prereq.: MATH 3715 and MATH 3720.  

MATH 3745 Topics in Mathematical Modeling 3 s.h.  
This course exposes students to methods of mathematical modeling through applications. Tools used to develop, refine, test, and present mathematical models will be discussed. Topics covered and projects undertaken may vary with each course offering and are designed to expose students to the types of problems modeled by applied mathematicians working in business, government, industry, or research. Course may be repeated depending on projects or topics presented.  
Prereq.: MATH 2673 or MATH 2686H or permission of the instructor.  

MATH 3745H Honors Topics in Mathematical Modeling 3 s.h.  
This course exposes students to methods of mathematical modeling through applications. Tools used to develop, refine, test, and present mathematical models will be discussed. Topics covered and projects undertaken may vary with each course offering and are designed to expose students to the types of problems modeled by applied mathematicians working in business, government, industry, or research. Course may be repeated depending on projects or topics presented.  
Prereq.: MATH 2673 or MATH 2686H or permission of the instructor.  

MATH 3750 History of Mathematics 3 s.h.  
A survey of the historical development of mathematics.  
Prereq.: MATH 3715.
MATH 3751  Real Analysis 1  4 s.h.
Introduction to the properties of the real number system and metrics and metric properties, with critical analysis of limits, continuity, differentiability, integration, and other fundamental concepts underlying the calculus.
Prereq.: MATH 2715 and one of MATH 2673 or MATH 2686H.

MATH 3767  Algebra/Geometry for Middle School Teachers 1  4 s.h.
MATH 3767, MATH 3768 is an integrated, conceptual, and function-centered approach to the foundations of algebra, geometry, and trigonometry for preservice middle childhood mathematics specialists. Emphasis on multiple approaches and representations, problem solving, and communication of mathematical reasoning. Includes inquiry-based experiences. MATH 3767 focuses on conceptual foundations of algebra and parts of coordinate geometry. Not applicable to the mathematics major.
Prereq.: Level 35 on the Mathematics Placement Test.

MATH 3768  Algebra/Geometry for Middle School Teachers 2  4 s.h.
MATH 3767 and MATH 3768 is an integrated, conceptual, and function-centered approach to the foundations of algebra, geometry, and trigonometry for preservice middle childhood mathematics specialists. Emphasis on multiple approaches and representations, problem solving, and communication of mathematical reasoning. Includes inquiry-based experiences. MATH 3768 focuses on synthetic, analytic and transformational geometry. Not applicable to the mathematics major.
Prereq.: MATH 2665 and level 35 on the Mathematics Placement Test.

MATH 3795  Topics in Mathematics  2-3 s.h.
The study of a mathematical topic or the development of a special area of mathematics. May be repeated once.
Prereq.: MATH 1570 or MATH 1571 or MATH 2623 or MATH 2651.

MATH 4822  Abstract Algebra 2  3 s.h.
A continuation of MATH 3721 with special emphasis on fields. Additional topics in pure or applied algebra.
Prereq.: MATH 3721 or equivalent.

MATH 4823  Abstract Algebra 3  3 s.h.
This course introduces advanced topics in field theory. Topics may include principal ideal domains, irreducibility, quotient rings, algebraic extensions, finite fields, splitting fields, and the Galois group.
Prereq.: MATH 4822.

MATH 4830  Foundations of Geometry  3 s.h.
The development of Euclidean and non-Euclidean geometries from postulate systems.
Prereq.: MATH 3715.

MATH 4832  Euclidean Transformations  3 s.h.
General properties of functions and transformations; isometries and transformations of the Euclidean plane; the complex plane, its geometry and subfields; transformational, analytical, and vector approaches to Euclidean geometry; connections to other branches of mathematics and applications.
Prereq.: MATH 3720 and MATH 4830.

MATH 4855  Ordinary Differential Equations  3 s.h.
A second course in differential equations with emphasis on nonlinear problems and qualitative methods or on boundary value problems. Topics are chosen from: proofs of fundamental theorems, phase plane analysis, limit cycles and the Poincare-Bendixon theorem, biological models, stability via Liapunov functions, asymptotic methods, and boundary value problems.
Prereq.: MATH 3705 and MATH 3720.

MATH 4857  Partial Differential Equations  3 s.h.
Introduction to partial differential equations (PDE) including solution techniques and applications. Classification of the basic types of PDE's (hyperbolic, parabolic and elliptic) and dependence on boundary and initial conditions. Topics include Fourier series, integral transforms (Fourier, Laplace), and applications in vibrations, electricity, heat transfer, fluids or other selected topics.
Prereq.: MATH 3705 and MATH 3720.

MATH 4869  Functions, Calculus, and Applications for Middle School Teachers  3 s.h.
Polynomial and exponential functions, limits, derivatives, integrals, and applications. Interpretation of slope and area in graphs of functions from applied settings. Applications of limits to the derivations of geometric formulas. Relations between tables, graphs, and the symbolic representation of functions.
Prereq.: MATH 3767 or consent of instructor.

MATH 4870  Mathematics Seminar for Middle School Teachers  3 s.h.
Problem solving from a broad spectrum of mathematics topics (Number Sense and Operations; Algebra, Functions, and Calculus; Measurement and Geometry; Statistics, Probability, and Discrete Mathematics) designed to prepare future middle school mathematics teachers to address Common Core Standards. May be repeated 2 times.
Prereq.: MATH 2665, MATH 3767, MATH 3768, MATH 4869, and either STAT 2601 or STAT 2625.

MATH 4875  Complex Variables  3 s.h.
Complex numbers and their geometric representation, analytic functions of a complex variable, contour integration, Taylor and Laurent series, residues and poles, conformal mapping.
Prereq.: MATH 3751 or equivalent.

MATH 4880  Introduction to Topology  3 s.h.
An introduction to the basic concepts of general topology: compactness, connectedness, and continuity in topological spaces.
Prereq.: MATH 3721 and MATH 3751.

MATH 4882  Mathematical Biology Research  1-3 s.h.
Introduction to research in mathematical biology through an interdisciplinary study of a topic in biology and mathematics. May be repeated once. Grading is Traditional/PR. Listed also as BIOL 4882.
Prereq.: MATH 1571 or permission of the instructor.

MATH 4882A  Biomathematics Research Topological Data Analysis/Neuroscience  1-2 s.h.
Interdisciplinary and individualized study of a topic in biology and mathematics. Student project mentored jointly by faculty in biology and mathematics. May be repeated once. Grading is Traditional/PR. Listed also as BIOL 4882.
Prereq.: MATH 3701, BIOL 3701, senior status and permission of the department chairperson.

MATH 4884  Mathematical Logic  3 s.h.
An introduction to the study of theories in formalized languages and to the theory of models.
Prereq.: MATH 3721 or PHIL 3719.

MATH 4896  Senior Undergraduate Research Project  2 s.h.
Individualized study of a topic in mathematics culminating in a written report and an oral presentation at a national or regional meeting or a local seminar. May be repeated once.
Prereq.: 24 s.h. of mathematics applicable to the mathematics major including either MATH 3721 or MATH 3751 and permission of the department chairperson.

MATH 4897H  Thesis  2 s.h.
Individualized study of a topic in mathematics culminating in a written report and an oral presentation at a national or regional meeting or a local seminar.
Prereq.: 24 s.h. of mathematics applicable to the mathematics major including both MATH 3721 and MATH 3751 and permission of the department chairperson.

MATH 5821  Topics in Abstract Algebra  4 s.h.
A course in abstract algebra aimed at developing a broad understanding of the subject. Credit will not be given for both MATH 3721 and MATH 5821.
Prereq.: MATH 3715 and MATH 3720.

MATH 5825  Advanced Linear Algebra  3 s.h.
A study of abstract vector spaces, linear transformations, duality, canonical forms, the spectral theorem, and inner product spaces.
Prereq.: MATH 3721.
MATH 5828  Number Theory  3 s.h.
A study of congruences, Diophantine equations, quadratic residues, special
number theory functions, and selected applications.
Prereq.: MATH 3721.

MATH 5835  Introduction to Combinatorics and Graph Theory  3 s.h.
The pigeonhole principle; permutations, combinations, the binomial theorem;
the inclusion-exclusion principle; recurrence relations; graphs and digraphs,
paths and cycles, trees, bipartite graphs and matchings.
Prereq.: MATH 3715 and MATH 3720.

MATH 5845  Operations Research  3 s.h.
An introduction to operations research with emphasis on mathematical
methods. Topics may include: linear programming, sensitivity analysis,
duality theory, transportation problems, assignment problems, transshipment
problems, and network problems.
Prereq.: MATH 3715 and MATH 3720.

MATH 5851  Topics in Analysis  4 s.h.
A course in analysis aimed at developing a broad understanding of the subject.
Credit will not be given for both MATH 3751 and MATH 5851.
Prereq.: MATH 2673 or MATH 2686H and MATH 3720 and MATH 3715.

MATH 5852  Real Analysis 2  3 s.h.
Uniform convergence of sequences of functions and some consequences;
fundamentals on n-space: derivatives in vector spaces, mean value theorem,
Taylor's formula, inverse mapping theorem, implicit mapping theorem.
Prereq.: MATH 3720 and MATH 3751 or equivalent.

MATH 5860  Numerical Analysis 1  3 s.h.
The theory and techniques of numerical computation. The solution of a single
equation, interpolation methods, numerical differentiation and integration,
direct methods for solving linear systems.
Prereq.: MATH 3720 and CSIS 2610 and MATH 2673, 2673H, or 2686H.

MATH 5861  Numerical Analysis 2  3 s.h.
Numerical methods of initial-value problems, eigenvalue problems, iterative
methods for linear and nonlinear systems of equations, and methods involving
least squares, orthogonal polynomials, and fast Fourier transforms.
Prereq.: MATH 5860 or equivalent.

MATH 5875  Complex Variables  3 s.h.
Complex numbers and their geometric representation, analytic functions of a
complex variable, contour integration, Taylor and Laurent series, residues and
poles, conformal mapping.
Prereq.: MATH 3751 or equivalent.

MATH 5895  Selected Topics in Mathematics  2-3 s.h.
The study of a standard mathematical topic in depth or the development of a
special area of mathematics. May be repeated twice.
Prereq.: 24 s.h. of mathematics applicable to the mathematics major including
either MATH 3721 or MATH 3751.

Statistics
STAT 2601  Introductory Statistics  3 s.h.
Designed for students from different disciplines who desire an introduction
to statistical reasoning. Topics include collecting and summarizing data,
concepts of randomness and sampling, statistical inference and reasoning,
correlation and regression. Credit will not be given for both STAT 2601 and
STAT 2625.
Prereq.: level 35 or higher on the Math Placement Test.
Gen Ed: Mathematics.

STAT 2625  Statistical Literacy and Critical Reasoning  4 s.h.
Topics include descriptive statistics, experimental design, probability sampling
distribution, statistical inference, correlation and regression. Emphasis on
applications, critical reasoning, and data analysis using statistical software.
Credit will not be given for both STAT 2601 and STAT 2625.
Prereq.: At least Mathematics Placement Level 15 or Mathematics Placement
Level 10 and concurrent enrollment in STAT 2625C
Gen Ed: Mathematics.

STAT 2625C  Corequisite Support for Statistical Literacy and Critical
Reasoning  2 s.h.
This course is intended to provide corequisite support for students requiring
remediation in mathematics while they are concurrently enrolled in STAT 2625
(Statistical Literacy and Critical Reasoning). Emphasis will be placed on
prerequisite skills needed for statistics as well as just in time review through
the use of appropriate technology. Does not count toward a degree.
Prereq.: Level 10 on the Mathematics Placement Exam and enrollment in
STAT 2625.

STAT 3717  Statistical Methods  4 s.h.
Probability and statistics designed for students majoring in the natural
sciences. Topics include descriptive statistics, probability, estimation, testing
hypotheses, analysis of variance, regression and nonparametric statistics. Use
of personal computers with computer software will be required. Credit will
not be given for both STAT 3717 and STAT 3743.
Prereq.: One of MATH 1552, MATH 1570, MATH 1571, Math 1571H,
MATH 1581H, MATH 1585H or equivalent.

STAT 3743  Probability and Statistics  4 s.h.
A calculus-based probability and statistics course. Topics include descriptive
statistics, probability models and related concepts and applications, statistical
estimation, and hypothesis testing. Credit will not be given for both STAT 3717
and STAT 3743.
Prereq.: MATH 1572 or MATH 1585H.

STAT 3781H  Honors Biostatistics  3 s.h.
Descriptive statistics, testing hypotheses, analysis of count data, correlation,
regression, nonparametric statistics, and analysis of variance with applications
related to biological and health sciences.
Prereq.: MATH 1580H and MATH 1581H, or equivalent.

STAT 4804  Long-Term Actuarial Mathematics 1  3 s.h.
An introduction to long-term actuarial mathematics through an analysis of
survival models and their applications as well as the determination and
interpretation of probabilities and statistics related to the present value
random variable.
Prereq.: STAT 3743 or consent of department chairperson.

STAT 4805  Long-Term Actuarial Mathematics 2  3 s.h.
A continuation of the study of long-term actuarial mathematics through the
application of premium-calculation methodologies and reserving.
Prereq.: STAT 4804.

STAT 4817  Applied Statistics  3 s.h.
Application of regression, survey sampling, analysis of variance, design and
analysis of experiments, and related topics.
Prereq.: STAT 3717 or STAT 3743 or equivalent.

STAT 4843  Theory of Probability  3 s.h.
The mathematical foundation of probability theory including the study of
discrete and continuous distributions. Other topics selected from limit
theorems, generating functions, stochastic processes, and applications.
Prereq.: STAT 3743 and one of MATH 2673 or MATH 2686H or consent of
department chairperson.

STAT 4844  Theory of Statistics  3 s.h.
The mathematical theory of statistical inferences including likelihood principle,
sufficient statistics, theory of statistical estimation, hypothesis testing and
related topics.
Prereq.: STAT 4843.

STAT 4845  Stochastic Process Models  3 s.h.
Introduction to the mathematical foundations of the theory and application of
stochastic processes. Topics include Markov processes, Poisson processes,
queuing theory, and simulation. Other topics selected from limit theorems,
Brownian Motion, and stationary processes.
Prereq.: STAT 4843.

STAT 4848  Applied Regression Time Series  3 s.h.
Statistical methods for regression and time series analysis. Topics include
applied linear regression with model fitting and diagnostics, data analysis, and
forecasting with time series models.
Prereq.: STAT 3717 or STAT 3743.
**STAT 4849** Design of Experiments 3 s.h.
The objective of this course is to learn how to plan, design and conduct experiments efficiently, and apply statistical techniques to resulting data to obtain conclusions. Topics include introduction of experiments, complete randomized designs, blocking designs, factorial designs, nested designs, and random effects models.
Prereq.: STAT 4817 or STAT 6940 or equivalent.

**STAT 4888** Actuarial Models in Financial Economics 3 s.h.
An introduction to actuarial models in financial economics. Topics include the Black-Scholes framework for pricing derivatives, the binomial pricing model, and interest rate models.
Prereq.: STAT 4843.

**STAT 4896** Statistical Project 2 s.h.
Individualized study of a topic in statistics culminating in a written report and an oral presentation. May be repeated once.
Prereq.: STAT 4817 and permission of chairperson.

**Gen Ed:** Capstone.

**STAT 5800** Mathematical Foundations of Actuarial Science 3 s.h.
A survey of probability theory and an introduction to risk management. Emphasis of the course will be on problem solving with applications in actuarial science.
Prereq.: STAT 4843 or consent of instructor.

**STAT 5802** Theory of Interest 3 s.h.
Mathematical theory and techniques in analysis of interest. Topics include measurement of interest, force of interest, annuities, amortization, pricing of investment products, and applications to actuarial sciences.
Prereq.: MATH 1572 and any 3700 level MATH, STAT, ECON, or FIN course.

**STAT 5806** Seminar in Actuarial Science 2-3 s.h.
Approaches to and practice with problem solving in actuarial science. Topics may include financial mathematics, financial economics, or actuarial modeling. May be repeated once. Not applicable to the mathematics major.
Prereq.: STAT 4843 or consent of the instructor.

**STAT 5811** SAS Programming for Data Analytics 3 s.h.
An introduction to SAS programming for data analytics. Topics include using SAS for data processing, manipulation, visualization, reporting and statistical analysis. The objective is for students to develop statistical computing skills for problem solving and decision making. Also listed as ECON 5861.
Prereq.: STAT 3717 or STAT 3743 or STAT 2601 or ECON 3790 or equivalent.

**STAT 5814** Statistical Data Mining 3 s.h.
A systematic introduction to data mining with emphasis on various data mining problems and their solutions. Topics include data mining processes and issues, exploratory data analysis, supervised and unsupervised learning, classification, and prediction methods.
Prereq.: STAT 3717 or STAT 3743, or consent of department chairperson.

**STAT 5819** Bayesian Statistics 3 s.h.
An introduction to the Bayesian approach to statistical inference for data analysis in a variety of applications. Data analysis using statistical software will be emphasized. Topics include: comparison of Bayesian and frequentist methods, Bayesian model specification, prior specification, basics of decision theory, Markov chain Monte Carlo, Bayes factor, empirical Bayes, Bayesian linear regression and generalized linear models, hierarchical models.
Prereq.: STAT 3717 or STAT 3743 or STAT 4817 or STAT 6940 or equivalent.

**STAT 5840** Statistical Computing 3 s.h.
Computational methods used in statistics. Topics include generation and testing of random numbers, computer intensive methods, and simulation studies.
Prereq.: STAT 3717 or STAT 3743.

**STAT 5846** Categorical Data Analysis 3 s.h.
Discrete distributions, contingency table analysis, odds ratios, relative risk, logistic regression, hierarchical models.
Prereq.: STAT 4817 or STAT 4844.

**STAT 5847** Nonparametric Statistics 3 s.h.
Nonparametric statistical inference including tests of hypotheses for one sample, two or more related independent samples, dependence, goodness-of-fit, trend, and related topics.
Prereq.: STAT 3717 or STAT 3743 or equivalent.

**STAT 5849** Multivariate Statistical Analysis 3 s.h.
The statistical analysis of multivariate observations. Topics include multivariate probability distribution theory; regression, analysis of variance, and techniques in data analysis.
Prereq.: MATH 3720 and STAT 4844 or equivalent.

**STAT 5857** Statistical Consulting 3 s.h.
The objective of this course is to cultivate the skills necessary to competently engage in statistical consulting. Topics include problem solving, study design, power and sample size, data management, selection and application of statistical methods, ethical practice, and effective visual and literal communication of results.
Prereq.: STAT 4817 or equivalent.

**STAT 5895** Special Topics in Statistics 2-3 s.h.
The study of a standard statistical topic in depth or the development of a special area of statistics. May be repeated twice.
Prereq.: STAT 3717 or STAT 3743.

**STAT 5895G** Special Topics: Monte Carlo Methods 2-3 s.h.
5895G. Special Topics in Statistics. The study of a standard statistical topic in depth or the development of a special area of statistics. May be repeated twice.
Prereq.: STAT 3717 or STAT 3743.

**STAT 5895I** Special Topics in Statistics Data Analytics Project 2-3 s.h.
The study of a standard statistical topic in depth or the development of a special area of statistics. May be repeated twice.
Prereq.: STAT 3717 or STAT 3743.

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**Placement and Pathways**

The following documents are provided to clarify mathematics placement and when a placement exam is required.

**Math Placement Guidelines**


**Flow Chart**


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**Bachelor of Science in Mathematics**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT 1500</td>
<td>Success Seminar</td>
<td>1-2</td>
</tr>
<tr>
<td>or SS 1500</td>
<td>Strong Start Success Seminar</td>
<td></td>
</tr>
<tr>
<td>or HONR 1500</td>
<td>Intro to Honors</td>
<td></td>
</tr>
</tbody>
</table>

**General Education Requirements**

| ENGL 1550 | Writing 1             | 3-4   |
or ENGL 1549 Writing 1 with Support  
ENGL 1551 Writing 2 3  
CMST 1545 Communication Foundations 3  
Mathematics Requirement (met with MATH in major)  
Arts and Humanities (6 s.h.) 6  
Natural Sciences (2 courses, 1 with lab) (6-7 s.h.) 7  
Social Science (6 s.h.) 6  
Social and Personal Awareness (6 s.h.) 6  
**Major Requirements**  
Core Courses  
Foreign Language 1550 4  
Foreign Language 2600 4  
MATH 1571 Calculus 1 4  
MATH 1572 Calculus 2 4  
MATH 2673 Calculus 3 4  
MATH 3715 Discrete Mathematics 3  
MATH 3720 Linear Algebra and Matrix Theory 3  
MATH 3721 Abstract Algebra 1 4  
MATH 3751 Real Analysis 1 4  
STAT 3743 Probability and Statistics 4  
CSIS 2610 Programming and Problem-Solving 4  
Select one of the following: 2  
MATH 4896 Senior Undergraduate Research Project  
MATH 4897H Thesis  
STEM 4890 STEM Internship  
Select two 3700-level MATH/STAT courses. 6  
Select two 4800-level MATH/STAT courses. 6  
Minor Courses: 18  
Elective 2  
Select three upper division electives 9  
**Total Semester Hours** 120-122  
Suggested minors include biology, chemistry, computer science, economics, geology, physics, psychology, one engineering specialty (from chemical, civil, electrical, industrial, mechanical), or statistics. The total number of required semester hours of credit in mathematics (excluding statistics courses) for this track is 40.  

**Year 1**  
**Fall**  
YSU 1500 Success Seminar 1  
MATH 1571 Calculus 1 4  
ENGL 1550 Writing 1 3-4  
or ENGL 1549 Writing 1 with Support  
GER domain (AH) 3  
Foreign Language 1550 4  
Elective 1  
**Semester Hours** 16-17  
**Spring**  
MATH 1572 Calculus 2 (Prerequisite) 4  
CSIS 2610 Programming and Problem-Solving 4  
ENGL 1551 Writing 2 3  
Foreign Language 2600 4  
**Semester Hours** 15  

**Year 2**  
**Fall**  
MATH 2673 Calculus 3 (Prerequisite) 4  

**Learning Outcomes**  
The student learning outcomes for a BS in mathematics are as follows:  
- Students will develop and demonstrate the ability to reason mathematically by constructing mathematical proofs and recognizing and accurately analyzing numerical data in all core courses. Students will learn that truth in mathematics is verified by careful argument, and will demonstrate the ability to make conjectures and form hypotheses, test the accuracy of their work, and effectively solve problems.  
- Students will learn to identify fundamental concepts of mathematics as applied to science and other areas of mathematics, and to interconnect the roles of pure and applied mathematics.  
- Students will demonstrate that they can communicate mathematical ideas effectively by completing a senior capstone project involving an
Certificate in Data Analytics

Data analysis is an integral component in modern business decision-making processes. The certificate program offers students training in essential skills in data analytics. It comprises the following three courses:

1. Data Management
2. Data Visualization
3. Predictive Modeling

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>DATX 5801</td>
<td>Data Management</td>
<td>3</td>
</tr>
<tr>
<td>DATX 5803</td>
<td>Data Visualization</td>
<td>3</td>
</tr>
<tr>
<td>DATX 5805</td>
<td>Predictive Modeling Algorithms</td>
<td>3</td>
</tr>
</tbody>
</table>

The pre-requisite for DATX 5801 is junior standing and GPA of 2.5 or higher (and is cross-listed with CSIS 3722). The prereqs for the other two DATX courses will be DATX 5801.

Students who successfully complete this program should be able to:

- manipulate and prepare a large data set for analysis through common techniques to clean data and identify trends and outliers;
- manage a large data set through database management and build an effective database application;
- describe and apply the common techniques used in data analytics and choose an appropriate technique to model and make predictions on a dataset.

Minor in Actuarial Science

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 2600</td>
<td>Business Applications of Microsoft Excel</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 2602</td>
<td>Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 2603</td>
<td>Managerial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>FIN 3720</td>
<td>Business Finance</td>
<td>3</td>
</tr>
<tr>
<td>ECON 3710</td>
<td>Intermediate Microeconomic Theory</td>
<td>3</td>
</tr>
<tr>
<td>ECON 3712</td>
<td>Intermediate Macroeconomic Theory</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Semester Hours: 18

If any of the above courses is part of the student's major, it may be substituted by an upper-division STAT course or BUS 3700.

Minor in Biomathematics

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select one of the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL 2601 &amp; 2601L</td>
<td>General Biology: Molecules and Cells and General Biology: Molecules and Cells Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 2602 &amp; 2602L</td>
<td>General Biology: Organisms and Ecology and General Biology: Organisms and Ecology Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 3711 or BIOL 3780/3780L</td>
<td>Cell Biology: Fine Structure or General Ecology</td>
<td>3-5</td>
</tr>
</tbody>
</table>

Select at least 3 s.h. of upper-division biology courses. 3

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1571</td>
<td>Calculus 1</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1572</td>
<td>Calculus 2</td>
<td>4</td>
</tr>
<tr>
<td>STAT 3717</td>
<td>Statistical Methods</td>
<td>4</td>
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</table>

Minor in Mathematics

Select one of the following courses: 3-4

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
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</thead>
<tbody>
<tr>
<td>MATH 2673</td>
<td>Calculus 3</td>
<td>4</td>
</tr>
<tr>
<td>MATH 3705</td>
<td>Differential Equations</td>
<td>4</td>
</tr>
<tr>
<td>MATH 3715</td>
<td>Discrete Mathematics</td>
<td>4</td>
</tr>
<tr>
<td>MATH 3720</td>
<td>Linear Algebra and Matrix Theory</td>
<td>4</td>
</tr>
<tr>
<td>MATH 3745</td>
<td>Topics in Mathematical Modeling</td>
<td>4</td>
</tr>
<tr>
<td>MATH/BIOL 4882</td>
<td>Mathematical Biology Research</td>
<td>4</td>
</tr>
<tr>
<td>MATH 5860</td>
<td>Numerical Analysis 1</td>
<td>4</td>
</tr>
<tr>
<td>STAT 4817</td>
<td>Applied Statistics</td>
<td>4</td>
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<tr>
<td>STAT 4848</td>
<td>Applied Regression Time Series</td>
<td>4</td>
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</table>

Total Semester Hours: 25-28

Option 1

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
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<tbody>
<tr>
<td>MATH 1571</td>
<td>Calculus 1</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1572</td>
<td>Calculus 2</td>
<td>4</td>
</tr>
</tbody>
</table>

Select at least 10 s.h. of MATH/STAT course work with MATH 1572 as a prerequisite, including at least 6 s.h. of course numbered above 3700. 10

Total Semester Hours: 18

Option 2

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1570</td>
<td>Applied Calculus 1</td>
<td>4</td>
</tr>
<tr>
<td>MATH 2670</td>
<td>Applied Calculus 2</td>
<td>5</td>
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</tbody>
</table>

Select at least 9 s.h. of MATH/STAT course work with MATH 1572 as a prerequisite, including at least 6 s.h. of course numbered above 3700. 9

Total Semester Hours: 18

Minor in Statistics

Select one of the following courses: 4-5

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1570</td>
<td>Applied Calculus 1</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1571</td>
<td>Calculus 1</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1572</td>
<td>Calculus 2</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1585H</td>
<td>Honors Accelerated Calculus 1</td>
<td>4</td>
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</table>

The following two statistics courses are required: 7

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT 3717</td>
<td>Statistical Methods</td>
<td>7</td>
</tr>
<tr>
<td>or STAT 3743 Probability and Statistics</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>STAT 4817</td>
<td>Applied Statistics</td>
<td>7</td>
</tr>
</tbody>
</table>

Select an additional 9 s.h. of upper division STAT courses, excluding STAT 3717, 3743, and 4817. 9

Total Semester Hours: 20-21

For equivalent courses, consult the Department of Mathematics and Statistics.

Students whose major degree programs require one or more of the required courses for the minor may substitute other upper-division statistics electives for those requirements. In particular, mathematics majors satisfy the requirements of the minor through at least 18 s.h. of required courses comprised of STAT 3743, STAT 4817, and 11 hours of STAT electives at the 4800-level or higher.

Department of Physics, Astronomy, Geology, and Environmental Sciences

Department of Physics, Astronomy, Geology, and Environmental Sciences
Room 2023 Ward Beecher Science Hall
Youngstown State University
Youngstown, Ohio 44555
Welcome
Welcome to the Department of Physics, Astronomy, Geology, and Environmental Sciences at YSU! We are proud of the unique opportunities we provide for our students. We are dedicated to the idea that students learn best by doing the activities considered to be the work of physicists, astronomers, geologists, and environmental scientists. Housed within our department is the Clarence R. Smith Mineral Museum, a world-class collection of rare and amazing minerals and fossils from around the world, and the Ward Beecher Planetarium sporting a 40-foot projection dome, a Chronos GOTO Star Projector, and a SciDome HB full-dome 4k digital projector. The planetarium and the museum are free and open to the public and are maintained and operated in part by students.

Our students also have access to state-of-the-art research equipment in our research labs and in the field. This equipment includes an atomic force microscope and an x-ray photoemission spectrometer for surface studies; a photolithography semiconductor mask aligner; a magnetron sputtering deposition system and a HeCd laser photoluminescence spectrometer for developing and testing new semiconductor materials and devices; and a Vibrant OPOTek optical parametric oscillator and several pulsed YAG lasers for non-linear optics studies of layered polymer materials; an x-ray photoemission spectrometer for surface composition studies; an ICP spectrometer for plasma spectrophotometry; chromatography systems for both ion chromatography and gas chromatography; a laser particle size analyzer and a wide variety of other bench-top instrumentation.

Students also regularly use the Ohio Supercomputer Facility to simulate physical systems in the solid state. Some students learn to use the latest data analysis tools and work with imaging data from telescopes around the world an in space. Some students become proficient in the use of field instrumentation using remote sensing and geophysical investigations. Field instruments include a DJI Matrice 600 drone with infra-red and optical imaging capability, ground penetrating radar, hand held x-ray fluorescence, 24 channel refraction seismograph, earth resistivity, proton magnetometer, high resolution GPS and total station surveying equipment.

Furthermore, the department has an endowment specifically for use to fund student employees working as assistants in our research labs. We strive to include students in our research projects, our planetarium shows, and in museum mineral site visits, and we are happy to discuss these opportunities with interested students.

Departmental Mission Statement
The Department of Physics, Astronomy, Geology, and Environmental Sciences strives to provide a high quality educational experience for its majors by involving undergraduate students in significant research activities to embody its philosophy of teaching through research; to continue and expand the research footprint of the department and the University; to serve the undergraduate population by offering challenging and essential course work; and to establish connections between the public and the scientific community and between the public and the University through outreach programs.

Courses are organized with the following aims:

- To provide well-rounded training in the physical sciences for those needing it for graduate study, industry, regulatory compliance, or secondary school teaching.
- To provide basic training for engineering and pre-professional students.
- To acquaint students from non-science programs with the methods, applications, and theories of the physical sciences in the modern world.

The program curricula, four-year plan, and minimum requirements for the degrees of Bachelor of Arts and Bachelor of Science are available through the links under the Programs of Study tab. These degrees may be earned in eight semesters if students average 15 hours per semester.

Program Directors / Coordinators
- **Geology Undergraduate Program Coordinator:** Dr. Jeff Dick (Email: jcdick@ysu.edu) (330) 941-1756
- **Environmental Science Undergraduate Program Coordinator:** Dr. Felicia Armstrong (Email: fparmstrong@ysu.edu) (330) 941-1385
- **Environmental Science Graduate Program Director:** Dr. Jeff Dick (Email: jcdick@ysu.edu) (330) 941-1756

Geological and Environmental Sciences
Geological and Environmental Sciences
Room 2120 Moser Hall
(330) 941-3616 Fax: (330) 941-2131
Department Chairperson: Dr. W. Gregg Sturrus (wgsturrus@ysu.edu)

Welcome
Welcome to the Geological and Environmental Sciences program at Youngstown State University. Our programs in Environmental Studies and Geology are distinguished by our applied approach to learning. Our dedicated faculty consists of five PhD degree professors and thirteen adjunct faculty members with strong backgrounds in academics and real-world experience. Our courses and degree programs prepare graduates for immediate employment and graduate studies opportunities by going well beyond the traditional class room experiences with a variety of field experiences, study abroad experiences, access to high-end analytical laboratories and instrumentation, internship opportunities and faculty-led undergraduate research experiences. Our laboratory facility instruments include plasma spectrophotometry, ion chromatography, gas chromatography, laser particle size analysis and a wide variety of bench-top instrumentation.

In addition, students have access to TEM, SEM, XRF, XRD and other high-end instrumentation through the Department of Chemical and Biological Sciences.

The program has a strong emphasis on remote sensing and geophysical investigations. Field instruments include a DJI Matrice 600 drone with infra-red and optical imaging capability, ground penetrating radar, hand held x-ray fluorescence, 24 channel refraction seismograph, earth resistivity, proton magnetometer, high resolution GPS and total station surveying equipment.

Graduates of our programs find personally rewarding and high-paying careers in the fields of petroleum geology, environmental geology, public health, engineering geology, government regulations and compliance, mining, hydrogeology, environmental safety, geophysics and related fields. Many graduates choose to continue their education by pursuing master of science and doctoral degrees in geology and environmental science.

The Geological and Environmental Sciences program is also the home of the Clarence R. Smith Mineral Museum, a world-class collection of rare and amazing minerals and fossils from around the world. The museum is free and open to the public.

For more information, visit the Department of Physics, Astronomy, Geology, and Environmental Sciences.

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- **Environmental Science Graduate Program Director:** Dr. Jeff Dick (Email: jcdick@ysu.edu) (330) 941-1756
An examination of earth as consisting of interrelated geologic systems which are dynamic and constantly changing. Includes study of surface, lithologic and tectonic systems.

Gen Ed: Natural Science.

GEOL 1505  Physical Geology  4 s.h.
A study of the various physical and chemical processes acting on and within the earth, and their products. The laboratory component includes identification of minerals and rocks, and the interpretation of topographic and geologic maps. Three hours of lecture, two hours of lab per week.

Gen Ed: Natural Science.

GEOL 1505L  Physical Geology Laboratory  0 s.h.
Physical Geology Laboratory.

GEOL 1508  Geology of Gemstones and Allied Minerals  3 s.h.
Formation, occurrence, and distribution of gem materials. Properties and identification of gem stones; factors affecting their value. Introduction to synthetic/artificial gem materials. Not applicable toward the geology major.

GEOL 1509L  Geoscience Laboratory  1 s.h.
Problem solving and assessment of case histories to illustrate the scientific method and geologic principles and concepts. Two hours laboratory per week.

GEOL 1510  Geology of National Parks  3 s.h.
Geologic history of national parks; geologic processes observed in North American parks and Hawaii. Simulated field trips to several major parks. Not applicable toward the geology major.

GEOL 2602  Introduction to Oceanography  3 s.h.
Survey of geological, physical, chemical, and biological oceanography; description and distribution of properties and their relationship to circulation, shorelines, ocean features, sediments, organisms, and environments.

Gen Ed: Natural Science.

GEOL 2605  Historical Geology  4 s.h.
An in depth study of the origin and evolution of the Earth and its systems and life forms throughout geologic time. The course is designed to develop student critical thinking skills through analysis of concepts and issues, and the integration of maps, lithologic information, and fossil information. Three hours lecture and two hours lab per week. Field trips are an integral part of the course.

Prereq.: GEOL 1505 and GEOL 1505L.

GEOL 2611  Geology for Engineers  3 s.h.
Study of geologic principles, processes, and materials; focus on recognition of geologic factors as they apply to engineering operations and projects. Laboratory work includes examination of minerals, rocks, maps, and case histories. Two hours lecture, two hours laboratory per week.

Gen Ed: Natural Science.

GEOL 2614  Mesozoic Dinosaurs and Other Reptiles  3 s.h.
A survey of major Mesozoic dinosaurs and reptiles, including discussion of their environment, organic evolution, diversity, and controversies pertaining to their classification and extinction.

Prereq.: GEOL 3713.

GEOL 2615  Geology and the Environment  1-3 s.h.
A study of the interrelationship of human activity and the geologic environment. An examination of geologic hazards, geologic considerations in waste disposal, resource utilization, and land use.

Prereq.: GEOL 1504 or GEOL 1505 or GEOL 2611.

GEOL 2620  Intro to Natural Gas and Water Resources  3 s.h.
A survey of the history, science and technology of oil and gas exploration and production and water resource related issues with an emphasis on non-conventional production in the Appalachian Basin.

Prereq.: MATH 1513, CHEM 1516 and CHEM 1516L.

GEOL 2699  Individual Study  1-3 s.h.
The introductory study of problems or issues in geology, or a review of literature relating to a specific geologic topic. A maximum of 3 s.h. may be taken.

Prereq.: 8 s.h. in Geology, consent of department chairperson and instructor.
GEOL 3700  Mineralogy  4 s.h.
The occurrence, composition, and crystallography of common and economically important minerals. Identification of minerals using physical, chemical, optical and x-ray properties. The theory and use of the polarizing microscope and its application to the study of crystalline material, including asbestos materials. Two hours lecture, four hours of lab per week. 
Prereq.: CHEM 1515 (may be concurrent) and GEOL 2605.

GEOL 3701  Geomorphology  3 s.h.
A study of landforms and the processes which create them, using aerial photographs, geologic maps, and topographic maps. The laboratory work emphasizes recognition and interpretation of landforms. Two hours lecture, two hours laboratory per week. 
Prereq.: GEOL 2605.

GEOL 3702  Glacial Geology  3 s.h.
A study of glacier types: their origin, movement, erosional/depositional contributions, and their relationship to various non-glacial features. Emphasis is on the Pleistocene glacial succession in North America. Field trips are an integral part of the course. 
Prereq.: GEOL 2605.

GEOL 3704  Structural Geology  2 s.h.
Description and interpretation of geologic structures, mechanical properties; stress-strain relationships, regional structure of North America, and major tectonic theories. Geology majors must take GEOL 3704L concurrently with GEOL 3704. 
Prereq.: GEOL 3701 and GEOL 3718.

GEOL 3704L  Structural Geology Laboratory  1 s.h.
Structural geology techniques and analyses, including orthographic solutions, stereographic projections, and interpretation of maps. Two hours lab per week. 
Prereq. or concurrent: GEOL 3704.

GEOL 3706  Geology of Economic Mineral Deposits  3 s.h.
A study of the occurrence, origin, and distribution of mineral deposits, with special attention to their economic use. Field trips are mandatory. 
Prereq.: GEOL 3700.

GEOL 3709  Subsurface Investigations  3 s.h.
An introduction to subsurface investigative methods that integrate principles of geophysics, geochemistry, interpretation of well logs and other bore hole data, outcrops and published information in the solution of actual geological problems. Two hours lecture, two hours lab per week. Students are expected to perform field work in addition to regularly scheduled class time. 
Prereq.: GEOL 3701; MATH 1571 recommended.

GEOL 3711  Mineralogy  3 s.h.
Field trip required. Two hours lecture and two hours lab per week. 
Prereq.: CHEM 1515 and CHEM 1515L (may be concurrent) and GEOL 2605.

GEOL 3714  Principles of Paleontology  3 s.h.
A detailed study of fossil invertebrates, including their origin, classification, paleoecology and stratigraphic utilization. Two hours lecture and two hours lab per week. 
Prereq.: GEOL 2605.

GEOL 3716  Environmental Impact of Abandoned Mines  3 s.h.
Mining methods, types of mines, information retrieval, mine stabilization, and the effects of abandoned mines on environmental and human activities, especially of deep coal mines in the Mahoning valley and adjacent areas. Two hours lecture and two hours lab per week. 
Prereq.: GEOL 2605.

GEOL 3717  Petrology  3 s.h.
A modern approach to understanding rocks within the context of plate tectonics and the use of rocks and minerals as natural resources in support of modern society. Emphasis is placed on investigating the formation, occurrence and classification of igneous, sedimentary and metamorphic rocks using physical, chemical and optical properties. Field Trip Required. Two hours lecture and two hours lab per week. Prereq. GEOL 3711 and CHEM 1516/1516L may be taken concurrently.

GEOL 3718  Igneous and Metamorphic Petrology  4 s.h.
An in-depth study of the petrogenesis of igneous and metamorphic rocks based on their chemical and petrographic characteristics. Three hours lecture, three hours lab per week. 
Prereq.: GEOL 3700.

GEOL 3720  Field Investigations in Geology  1-4 s.h.
A field-based approach to the study of geologic concepts and problems. Class and travel supervised by the Geology faculty; location, duration of stay, hours, credit, and grading criteria dependent on the site and nature of the geologic concepts and problems investigated. The course may be repeated. A maximum of 4 s.h. may be applied toward Geology major requirements. 
Prereq.: By permit only.

GEOL 3750  Geoscience Seminar  1 s.h.
Guest lecture and student presentation forum course designed to provide students with exposure to a broad range of topics and current research relevant to the geosciences. Course may be repeated. 
Prereq.: GEOL 1505.

GEOL 3775  Research Methods for Undergraduates  1 s.h.
This course introduces the student to the fundamental and practical aspects of conducting research. The course emphasizes the scientific method, research methodologies, literature review, writing research proposals, and how research results are presented. Learn the process of developing, funding and conducting research. This course must be taken prior to any undergraduate research. 
Prereq.: junior or senior standing.

GEOL 4804  Ground Water  3 s.h.
A study of the geologic and hydrologic factors controlling the occurrence and behavior of water beneath the earth’s surface. Two hours lecture, two hours lab per week. 
Prereq.: GEOL 2605; MATH 1571 recommended.

GEOL 4812  GIS Applications to Geology  3 s.h.
This course covers a variety of geologic applications of GIS software; topics covered include: flood mapping, landslide hazard mapping, modeling soil erosion, watershed delineation, etc. Although you will be exposed to the basic functions of ArcGIS, the course is designed primarily to provide experience in obtaining, managing, interpreting, displaying, and presenting geo-spatial data in a meaningful context. 
Prereq.: GEOL 3701, GEOG 2611.

GEOL 4820  Water Pollution Control  3 s.h.
Sources and prevention methods of water pollution, human activities and natural conditions that influence water quality, protection methods and regulations of water quality, contamination and remediation of groundwater. 
Prereq.: GEOL 1505 or ENST 2600.

GEOL 4824  Tectonics  3 s.h.
Geodynamics and the workings of plate tectonics. Kinetics and dynamics of plate motion, plate driving forces, thermal structure of the earth, and thermal convection in the earth. Tectonic and structural features on the earth. Geophysical, stratigraphic and structural signatures of extensional rifting, strike-slip faulting, subduction zones, plate collisions and mountain belts. 
Prereq.: GEOL 3704.

GEOL 4825  Geophysical Well Log Analysis  3 s.h.
An introduction to geophysical well logging, analysis, and interpretation applications in the oil and gas industry. Topics include well construction, drilling mud properties, and interpretation of gamma ray, SP resistivity, sonic, neutron density, and cement bond logs. 
Prereq.: GEOL 2620 or permission of instructor; GEOL 3704, PHYS 1502 or PHYS 2611 recommended.
GEOL 4830 Senior Thesis 4 s.h.
Designed to be completed during the student’s senior year and is expected to be a significant research-based contribution to the geosciences. A typical senior thesis topic will support the research program of full-time GES faculty. Students may develop their own research topic provided they have the support of one or more full-time GES faculty.
Prereq.: Junior standing, minimum cumulative GPA of 3.0, submission of approved research proposal, permission of GES Chairperson.

GEOL 4899 Special Topics 1-3 s.h.
Selected aspects of geology not covered in existing courses. Topics to be announced each time course is offered. May be repeated for different topics.
Prereq.: appropriate 3700- or 4800- geology course and permission of the chairperson.

GEOL 4899D Special Topics Geological Data Analysis 1-3 s.h.
Selected aspects of geology not covered in existing courses. Topics to be announced each time course is offered. May be repeated for different topics.
Prereq.: appropriate 3700- or 4800- geology course and permission of the chairperson.

GEOL 4899E Special Topics Engineering Geology 1-3 s.h.
Selected aspects of geology not covered in existing courses. Topics to be announced each time course is offered. May be repeated for different topics.
Prereq.: appropriate 3700- or 4800- geology course and permission of the chairperson.

GEOL 4899F Special Topics Geological Field Methods 1-3 s.h.
Selected aspects of geology not covered in existing courses. Topics to be announced each time course is offered. May be repeated for different topics.
Prereq.: appropriate 3700- or 4800- geology course and permission of the chairperson.

GEOL 4899G Special Topics Petroleum Geology of the Appalachian Basin 1-3 s.h.
Selected aspects of geology not covered in existing courses. Topics to be announced each time course is offered. May be repeated for different topics.
Prereq.: appropriate 3700- or 4800- geology course and permission of the chairperson.

GEOL 4899H Special Topics Research Methods in Geology 1-3 s.h.
Selected aspects of geology not covered in existing courses. Topics to be announced each time course is offered. May be repeated for different topics.
Prereq.: appropriate 3700- or 4800- geology course and permission of the chairperson.

GEOL 5802 Sedimentology and Stratigraphy 3 s.h.
The study and interpretation of sedimentary rocks, including physical characteristics, petrography, depositional environments, principles of correlation, and principles of basin analysis. Two hours lecture, two hours lab per week.
Prereq.: GEOL 3704.
Gen Ed: Capstone.

GEOL 5805 Special Problems in Geology 1-4 s.h.
An in-depth study of a specific problem in one of the branches of geology. The problem depends on the student’s interest and qualifications and the equipment availability. A maximum of 8 s.h. may be taken.
Prereq.: 8 s.h. in Geology, consent of the department chairperson and instructor.

GEOL 5810 Groundwater Resource Evaluation 3 s.h.
Geologic and hydrologic interpretation of groundwater data with emphasis on regional groundwater resources, groundwater management, groundwater supplies, and design and construction of water wells.
Prereq.: GEOL 2605 or permission of instructor.

GEOL 5815 Geology and the Environment 2 3 s.h.
In-depth examination of earth processes, earth resources, and properties of earth materials as they relate to human activities, and their geologic consequences.
Prereq.: GEOL 2615 or ENST 2600.

GEOL 5817 Environmental Geochemistry 3 s.h.
An application of low-temperature aqueous geochemistry and geochemical computer modeling to environmental problems such as acid mine drainage, geochemical cycling of trace elements and nutrients, hazardous waste remediation, nuclear waste disposal, and surface and ground-water contamination.
Prereq.: GEOL 3700 and CHEM 1516.

Environmental Studies
ENST 1500 Introduction to Environmental Science 3 s.h.
Basic environmental science literacy for informed citizens as inhabitants and stewards of Earth. The use of science and the scientific method to understand, assess, and manage the environment to improve human health, conserve energy and resources, preserve nature, and sustain quality of life.
Gen Ed: Environmental Sustainability, Natural Science, Social and Personal Awareness.

ENST 1500L Introduction to Environmental Science Lab 1 s.h.
The use of the scientific method to explore various fields in environmental science including water quality, risk assessment, biodiversity and mineral uses. This field and laboratory work supplements ENST 1500.
Prereq. or concurrent: ENST 1500.

ENST 2600 Foundations of Environmental Studies 3 s.h.
A survey of the principles and issues of environmental studies including basic ecology, biodiversity, hazardous and solid waste management, sustainable development, energy production and conservation, environmental ethics, air, water and soil pollution.

ENST 2600L Foundations of Environmental Studies Laboratory 1 s.h.
Laboratory and field investigations identified in ENST 2600. Emphasis on the scientific method, problem solving and critical thinking skills in environmental assessment techniques, active exploration of environmental concerns and their solutions. Three hours per week. Three to five Saturday field trips required in lieu of some laboratory time.

ENST 2650 Independent Study 1-3 s.h.
The introductory study of problems or issues in Environmental Studies or a review of the literature relating to a specific environmental topic. May be repeated for different topics for a total of 6 s.h.
Prereq.: Permission of the director.

ENST 3700 Environmental Chemistry 4 s.h.
Study of the fundamental chemical principles underlying common environmental problems, including water pollution, toxicology, chemical biotransformation and degradation. Chemistry of pesticides, petroleum hydrocarbons and heavy metals are also investigated. Taken with ENST 3700L.
Prereq.: ENST 2600 and CHEM 1515.

ENST 3700L Environmental Chemistry Lab 0 s.h.
Students will investigate various analytical and instrumental techniques used in the examination of chemicals in environmental media (soil, water, biota). Includes proper handling, storage and precautions in the laboratory and the environment. Taken with ENST 3700.

ENST 3730 Air Quality 3 s.h.
Sources, dispersions, consequences and abatement of air pollutants emanating from industry and transportation. Topics also include the history, legislation, standards and economics of air pollution.
Prereq.: CHEM 1515.

ENST 3750 Seminar 1 s.h.
Guest lecturers will examine current topics in environmental issues, including current research, application of technology, management strategies to reduce environmental impact, environmental ethics, policy, etc.
Prereq.: ENST 2600.
ENST 3751 Water Quality Analysis 3 s.h.
Introduction to physical, chemical, and biological measurements of water quality. Sample collection and laboratory analysis of natural waters, drinking water, and wastewater. Interpretation of environmental data. Two hours lecture and three hours laboratory per week. Identical to CEEN 3751.
Prereq.: CEEN 3736 OR ENST 2600; CHEM 1515.

ENST 3751L Water Quality Analysis Lab 0 s.h.
Laboratory experience in the analysis of natural waters, drinking water and wastewater. Emphasizes procedures for the collection and interpretation of data on current environmental problems. Three hours laboratory per week. Must be taken concurrently with ENST 3751. Identical to CEEN 3751L.
Prereq.: Must be taken concurrently with ENST 3751 (Note: already in course description.

ENST 3752 Soil Quality and Analysis 3 s.h.
Soil is an important environmental medium that must be analyzed to assess quality standards. Students develop the ability to conduct laboratory experiments and to critically analyze and interpret soil data. Furthermore, this course contributes to the background knowledge students need to assess environmental impact and risk, sustainability, health and safety.
Prereq.: CHEM 1515 and CHEM 1515L or equivalent.

ENST 3775 Research Methods for Undergraduate 1 s.h.
This course introduces the student to the fundamental and practical aspects of conducting research. The course emphasizes the scientific method, research methodologies, literature review, writing research proposals and the presentation of research results. Students will gain valuable experience in identifying a problem, developing a research plan and summarizing results. This course must be taken prior to engaging in undergraduate research.
Prereq.: junior or senior standing.

ENST 3780 Environmental Research 1-4 s.h.
A research project that involves problem identification, hypothesis formation, experimentation, data analysis and interpretation. The research may be either basic or applied.
Prereq.: Junior standing in ENST and permission of the director.

ENST 3781 Environmental Sampling Methods 3 s.h.
Sampling design, including number and types of samples and procedures for taking representative samples of air, water, soil and contents of storage and shipping containers. Two hours of lecture, three hours of laboratory.
Prereq.: ENST 2600 and STAT 2601 or equivalent.

ENST 3790 Internship/Cooperative 1-4 s.h.
Students work under the direction of a faculty supervisor in a governmental agency or in the private sector as environmental specialists. An activities log and summary report are required. The course may be repeated.
Prereq.: Junior standing in ENST and permission of the director.

ENST 4822 Water Pollution Control 3 s.h.
Sources and prevention methods of water pollution, human activities and natural conditions that influence water quality, protection methods and regulations of water quality, contamination and remediation of groundwater. 3 s.h.
Prereq.: GEOL 1505 or ENST 2600.

ENST 4840 Topics 1-3 s.h.
Independent study of special topics not included in available courses. Students do extensive reading in, and write a formal report on, a specific area of Environmental Studies.
Prereq.: Junior standing or consent of instructor.

ENST 4840I Topics Intro to Energy Resources 1-3 s.h.
Independent study of special topics not included in available courses. Students do extensive reading in, and write a formal report on, a specific area of Environmental Studies.
Prereq.: Junior standing or consent of instructor.

ENST 4840K Topics Environmental Science and Art 1-3 s.h.
Independent study of special topics not included in available courses. Students do extensive reading in, and write a formal report on, a specific area of Environmental Studies.
Prereq.: Junior standing or consent of instructor.

ENST 5800 Environmental Impact Assessment 3 s.h.
Analysis of the potential environmental effects resulting from the construction of buildings, highways, parking lots, mines, reservoirs, and waste disposal facilities. Standard procedures are taught for evaluating and reporting the environmental impact of these activities.
Prereq.: ENST 5860 and senior standing.

ENST 5810 Environmental Safety 1 s.h.
The proper use of environmental monitoring instruments and personal protective gear. Participation in a series of realistic, hands-on simulation exercises that address a variety of waste clean-up situations. Topics include chemical and physical hazards of chemical compounds and toxicology and adverse effects of chemical exposure. Class meets three hours per week. Successful completion of the course earns OSHA Hazwoper 40 hour training certificate.
Prereq.: ENST 2600, equivalent experience or permission of instructor.

ENST 5820 Sustainability, Climate Change, and Society 3 s.h.
This course explores environmental, economic, and social aspects of sustainable development, with an emphasis on economy and society. Through topics such as water, food, and climate change, we examine the role of humans and institutions in sustainable development and possibilities for reconfiguring relationships between our institutions and the natural world.
Prereq.: junior, senior or graduate level standing.

ENST 5830 Toxicology and Risk Assessment 3 s.h.
A study of environmental toxicology of chemicals, primarily anthropogenic pollutants, and their effect on humans and ecosystems. Includes transportation of pollutants in the environment, biochemical reactions, toxicity testing methods, and dose-response assessment. Continues with an introduction in the process of estimating risk and the perception of those risks including how risk is used to set environmental standards.
Prereq.: ENST 1516 and 9 sh >3700 in ENST, CHEM, BIOL, GEOL or CEEN, junior, senior or graduate standing.
Gen Ed: Capstone.

ENST 5840 Environmental Regulations 3 s.h.
An examination of federal and state regulations that relate to cleanup of abandoned waste sites, management of waste from current waste generators, development of new hazardous products and chemicals, safety and health issues, and control of pollution into air and water.
Prereq.: ENST 2600 or equivalent.

Bachelor of Science in Environmental Sciences

The environmental studies program leading to a Bachelor of Science (BS) degree will prepare students to enter the job market as environmental specialists or to continue in their education in a graduate program. Students in environmental science will complete:

- 36-39 s.h. of environmental studies courses
- 30-31 s.h. of support courses in science and mathematics
- a prescribed minor of 18 s.h

The minor must include 9 s.h. of upper division courses (3000 level and above) and may be in:

- biology or biomathematics
- chemistry
- economics
- environmental geography
- environmental health and safety
- geographic information science
- geoscience or environmental geology
- mathematics or statistics
• mechanical engineering
• public health

Credits may include those required for support science and mathematics, as applicable. The minor must be approved by the University. The student is welcome to take additional courses in other departments as electives. Students are encouraged to develop teamwork, communication, computer and problem-solving skills. This degree may be earned in eight semesters if students average 15 hours per semester.

Majors transferring in from other programs at YSU or from other universities may use up free electives and/or require additional semesters or summers of study. College and university requirements apply (total hours, upper division courses, etc.). One writing intensive, oral intensive, critical thinking intensive, and capstone course can be satisfied within this program.

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<td>ENGL 1550</td>
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<td>Natural Sciences (2 courses, 1 with lab) (6-7 s.h.)</td>
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<td>ENST 2600</td>
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<td>ENST 3751</td>
<td>Water Quality Analysis</td>
<td>3</td>
</tr>
<tr>
<td>or ENST 3752</td>
<td>Soil Quality and Analysis</td>
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</tr>
<tr>
<td>ENST 3780</td>
<td>Environmental Research</td>
<td>2</td>
</tr>
<tr>
<td>or ENST 3784</td>
<td>Research Experience in Environmental Science</td>
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</tr>
<tr>
<td>ENST 3790</td>
<td>Internship/Cooperative</td>
<td>4</td>
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<tr>
<td>ENST 5810</td>
<td>Environmental Safety</td>
<td>3</td>
</tr>
<tr>
<td>Core Options, select 1</td>
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<tr>
<td>ENST 4822</td>
<td>Water Pollution Control</td>
<td>3</td>
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<tr>
<td>or ENST 5800</td>
<td>Environmental Impact Assessment</td>
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<tr>
<td>or ENST 5830</td>
<td>Risk Assessment</td>
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<tr>
<td>Select 3 ENST Electives (any &gt;3700). One course may come from these electives:</td>
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<tr>
<td>GEOL 5817</td>
<td>Environmental Geochemistry</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 3780</td>
<td>General Ecology</td>
<td>5</td>
</tr>
<tr>
<td>GEOL 5815</td>
<td>Geology and the Environment</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 3703</td>
<td>Human Impacts on the Environment</td>
<td>3</td>
</tr>
<tr>
<td>CEEN 3717</td>
<td>Hydraulic Design</td>
<td>4</td>
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<td>BIOL Course &gt;3700</td>
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<tr>
<td>Support Courses in Science and Mathematics</td>
<td></td>
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<tr>
<td>CHEM 1515</td>
<td>General Chemistry 1 Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>&amp; 1515L</td>
<td>and General Chemistry 1 Laboratory</td>
<td></td>
</tr>
<tr>
<td>CHEM 1516</td>
<td>General Chemistry 2</td>
<td>4</td>
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<tr>
<td>&amp; 1516L</td>
<td>and General Chemistry 2 Laboratory</td>
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<tr>
<td>CHEM 1515R</td>
<td>Recitation for General Chemistry 1</td>
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<tr>
<td>&amp; CHEM 1516R</td>
<td>and Recitation for General Chemistry 2 (optional)</td>
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<tr>
<td>BIOL 2602</td>
<td>General Biology: Organisms and Ecology</td>
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<tr>
<td>&amp; 2602L</td>
<td>General Biology: Organisms and Ecology Laboratory</td>
<td></td>
</tr>
<tr>
<td>GEOL 1505</td>
<td>Physical Geology</td>
<td>4</td>
</tr>
<tr>
<td>&amp; 1505L</td>
<td>Physical Geology Laboratory (satisfies GER Science or Lab)</td>
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</tr>
<tr>
<td>MATH 1571</td>
<td>Calculus 1</td>
<td>4</td>
</tr>
<tr>
<td>or MATH 1570</td>
<td>Applied Calculus 1</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 2611</td>
<td>Geospatial Foundations</td>
<td>3</td>
</tr>
<tr>
<td>STAT 2601</td>
<td>Introductory Statistics</td>
<td>3</td>
</tr>
<tr>
<td>or STAT 2625</td>
<td>Stat Lit and Crit Reasoning</td>
<td></td>
</tr>
<tr>
<td>or STAT 3717</td>
<td>Statistical Methods</td>
<td></td>
</tr>
<tr>
<td>or STAT 3743</td>
<td>Probability and Statistics</td>
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<tr>
<td>PHYS 1501</td>
<td>Fundamentals of Physics 1</td>
<td>4</td>
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<tr>
<td>or PHYS 2610</td>
<td>General Physics 1</td>
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<tr>
<td>Minor</td>
<td>Select 17 s.h. from approved minors; 1/3 must be at the 3700 level or higher</td>
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<td>Total Semester Hours</td>
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<td>120-121</td>
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</table>

1. Satisfies General Education Science or Science Lab Domain.
2. Satisfies General Education Mathematics Domain.
3. Satisfies General Education Science Domain.

Year 1

| Semester Hours | 15-16 |

Fall | S.H. |
<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>YSU 1500</td>
<td>Success Seminar</td>
</tr>
<tr>
<td>CHEM 1515 &amp; 1515L</td>
<td>General Chemistry 1 and General Chemistry 1 Laboratory (R, NS)</td>
</tr>
<tr>
<td>ENGL 1550 or ENGL 1549</td>
<td>Writing 1 (GE) or Writing 1 with Support</td>
</tr>
<tr>
<td>ENST 2600 &amp; 2600L</td>
<td>Foundations of Environmental Studies and Foundations of Environmental Studies Laboratory (R)</td>
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<tr>
<td>GER SS or AH course</td>
<td></td>
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</table>

Spring

| Semester Hours | 15-16 |

CHEM 1516 & 1516L | General Chemistry 2 and General Chemistry 2 Laboratory (R, NS) | 4 |
| ENGL 1551 | Writing 2 (GE) | 3 |
| Elective Support Course (R) | | 3 |
| GER SS or AH course | | 3 |
| GER SPA Course | | 3 |

Year 2

| Semester Hours | 14 |

Fall

| Semester Hours | 16 |

MATH 1570 or MATH 1571 | Applied Calculus 1 (GE) or Calculus 1 | 4 |
| BIOL 2601 & 2601L | General Biology: Molecules and Cells and General Biology: Molecules and Cells Laboratory (R, NS) | 4 |
| CMST 1545 | Communication Foundations (GE) | 3 |
| ENST 3730 | Air Quality (R) | 3 |
Learning Outcomes

The student learning outcomes for the BS in environmental science are as follows:

• Communicate effectively using the language, concepts, and models of environmental science in written, visual, and numerical formats.
• Properly apply the scientific method to research an environmental problem and formulate conclusions.
• Demonstrate ability to apply appropriate field- and laboratory-based methods (of acquiring, quantitatively and qualitatively analyzing and interpreting environmental data and information).
• Demonstrate understanding of pollution sources, pollution prevention strategies, and waste management.

Bachelor of Arts in Geology

The Bachelor of Arts in Geology prepares students for entry-level employment within the wide-ranging fields of geology. The dominant fields of geological employment include:

• Environmental geology
• Construction
• Petroleum geology
• Water resources
• Mining
• Hydrogeology
• Government regulations and compliance
• Pipeline construction

The Bachelor of Arts in Geology degree program can be completed in eight semesters if students average sixteen hours of coursework per semester.

For more information, visit the Department of Physics, Astronomy, Geology, and Environmental Sciences.

The Bachelor of Arts degree requires the successful completion of a minimum of 72 s.h. of core and elective courses.

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<tr>
<th>COURSE</th>
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<tbody>
<tr>
<td>ENST 1500</td>
<td>Success Seminar</td>
<td>1-2</td>
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<tr>
<td>or SS 1500</td>
<td>or HONR 1500</td>
<td>Intro to Honors</td>
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</table>

General Education Requirements

| ENGL 1550 | Writing 1 | 3 |
| ENGL 1551 | Writing 2 | 3 |
| CMST 1545 | Communication Foundations | 3 |
| Mathematics Requirement | 3 |
| Arts and Humanities (6 s.h.) | 6 |
| Natural Sciences (2 courses, 1 with lab) (6-7 s.h.) | 7 |
| Social Science (6 s.h.) | 6 |
| Social and Personal Awareness (6 s.h.) | 6 |

Foreign Language Requirement

| FNIG 1550 | Elementary Foreign Language | 4 |
| FNIG 2600 | Intermediate Foreign Language | 4 |

Major Requirements

| GEOL 1505 | Physical Geology | 4 |
| & 1505L | and Physical Geology Laboratory |
| ENST 2600 | Foundations of Environmental Studies | 4 |
| & 2600L | and Foundations of Environmental Studies Laboratory |
| GEOL 2605 | Historical Geology | 4 |
| GEOL 3700 | Mineralogy | 3 |
| GEOL 3701 | Geomorphology | 3 |
| GEOL 3718 | Igneous and Metamorphic Petrology | 3 |
| GEOL 3704 | Structural Geology | 3 |
| GEOL 3704L | Structural Geology Laboratory | 1 |
| GEOL 3750 | Geoscience Seminar | 1 |
| GEOL 5802 | Sedimentology and Stratigraphy (Capstone course) | 3 |

Request a Graduation Evaluation after completing 80-85 s.h. from the STEM Advising Center, 2325 Moser Hall, (330) 941-2512.
### Bachelor of Arts in Geology

**Electives**

#### Science Electives I:

Select a minimum of 21 s.h. from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
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<tbody>
<tr>
<td>ASTR 2609</td>
<td>Moon and Planets</td>
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<tr>
<td>BIOL 2601</td>
<td>General Biology: Molecules and Cells</td>
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<tr>
<td>&amp; 2601L</td>
<td>General Biology: Molecules and Cells Laboratory</td>
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<tr>
<td>BIOL 2602</td>
<td>General Biology: Organisms and Ecology</td>
</tr>
<tr>
<td>&amp; 2602L</td>
<td>General Biology: Organisms and Ecology Laboratory</td>
</tr>
<tr>
<td>CHEM 1515</td>
<td>General Chemistry 1</td>
</tr>
<tr>
<td>&amp; 1515L</td>
<td>General Chemistry 1 Laboratory</td>
</tr>
<tr>
<td>CHEM 1516</td>
<td>General Chemistry 2</td>
</tr>
<tr>
<td>&amp; 1516L</td>
<td>General Chemistry 2 Laboratory</td>
</tr>
<tr>
<td>GEOL 2630</td>
<td>Weather</td>
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<tr>
<td>MATH 2670</td>
<td>Applied Calculus 2</td>
</tr>
<tr>
<td>PHYS 1502</td>
<td>Fundamentals of Physics 2</td>
</tr>
<tr>
<td>&amp; 1502L</td>
<td>Fundamentals of Physics 2 Laboratory</td>
</tr>
<tr>
<td>STAT 3717</td>
<td>Statistical Methods</td>
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**Total Prescribed Semester Hours:** 108-111 s.h.

### Year 1

#### Fall

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<tbody>
<tr>
<td>YSU 1500</td>
<td>Success Seminar</td>
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<tr>
<td>GEOL 1505</td>
<td>Physical Geology</td>
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<tr>
<td>&amp; 1505L</td>
<td>Physical Geology Laboratory</td>
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<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
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<tbody>
<tr>
<td>ENGL 1550</td>
<td>Writing 1</td>
</tr>
<tr>
<td>or ENGL 1549</td>
<td>Writing 1 with Support</td>
</tr>
<tr>
<td>CHEM 1515</td>
<td>General Chemistry 1</td>
</tr>
<tr>
<td>&amp; 1515L</td>
<td>General Chemistry 1 Laboratory</td>
</tr>
<tr>
<td>GER Arts and Humanities Elective</td>
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<tr>
<td>GEOL 3750</td>
<td>Geoscience Seminar</td>
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**Semester Hours:** 16-17

### Year 2

#### Fall

<table>
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<tr>
<th>Course Code</th>
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<tbody>
<tr>
<td>GEOL 3700</td>
<td>Mineralogy</td>
</tr>
<tr>
<td>&amp; 1570</td>
<td>Applied Calculus 1</td>
</tr>
<tr>
<td>MATH 5801</td>
<td>Geographic Information Science 1</td>
</tr>
<tr>
<td>ENST 2600</td>
<td>Foundations of Environmental Studies</td>
</tr>
<tr>
<td>&amp; 2600L</td>
<td>Foundations of Environmental Studies Laboratory</td>
</tr>
<tr>
<td>GEOL 3750</td>
<td>Geoscience Seminar (Optional)</td>
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</table>

**Semester Hours:** 16

#### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
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<tbody>
<tr>
<td>GEOL 3718</td>
<td>Igneous and Metamorphic Petrology</td>
</tr>
<tr>
<td>Science Elective II</td>
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<tr>
<td>CMST 1545</td>
<td>Communication Foundations</td>
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<tr>
<td>Science Elective I</td>
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<td>Science Elective I</td>
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**Semester Hours:** 16

### Year 3

#### Fall

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<tr>
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<td>FNLG 1550</td>
<td>Elementary Foreign Language</td>
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<tr>
<td>GER Social Science Elective</td>
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<tr>
<td>GEOL/ENST 3700+</td>
<td>Science Elective II</td>
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<tr>
<td>GEOL 3750</td>
<td>Geoscience Seminar (Optional)</td>
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<td>Science Elective I</td>
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**Semester Hours:** 16

#### Spring

<table>
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<tr>
<th>Course Code</th>
<th>Course Name</th>
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<tbody>
<tr>
<td>GEOL 3704</td>
<td>Structural Geology</td>
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<tr>
<td>&amp; 3704L</td>
<td>Structural Geology Laboratory</td>
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<tr>
<td>FNLG 2600</td>
<td>Intermediate Foreign Language</td>
</tr>
<tr>
<td>GER Arts and Humanities</td>
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</tr>
<tr>
<td>GEOL/ENST Science Elective II</td>
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<tr>
<td>ENST 5810</td>
<td>Environmental Safety</td>
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</table>

**Semester Hours:** 17

### Year 4

#### Fall

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<th>Course Name</th>
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<tr>
<td>GEOL 3750</td>
<td>Geoscience Seminar (Optional)</td>
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<td>GER Social Personal Awareness</td>
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<tr>
<td>GEOL/ENST 3700+</td>
<td>Science Elective II</td>
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<td>Elective Course</td>
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**Semester Hours:** 16

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*Note: S.H. stands for Semester Hours.*
Bachelor of Science in Geology

Geology exists as a science to satisfy the needs of modern society for earth's abundant natural resources and to ensure sustainable practices for future generations. The Department of Geological and Environmental Sciences offers two different geology degrees; the Bachelor of Arts and the Bachelor of Science. Both programs prepare graduates for employment, however the Bachelor of Science is considered the flagship degree as its more rigorous curriculum provides significant employment advantages and prepares graduates for admission to Master of Science and Doctor of Philosophy (PhD) programs. The dominant fields of employment include:

- Engineering geology
- Water resources
- Construction
- Hydrogeology
- Petroleum geology
- Environmental geology
- Geophysics
- Mining
- Government regulation and compliance work
- Employment related to the energy industry

The Bachelor of Arts and the Bachelor of Science degrees in Geology can be completed in eight semesters if students average 16 hours of coursework per semester.
For more information, visit the Department of Geological and Environmental Sciences (https://catalog.ysu.edu/undergraduate/colleges-programs/college-science-technology-engineering-mathematics/department-geological-environmental-sciences/)

The Bachelor of Science degree requires the successful completion of a minimum of 74 s.h. of core and elective courses. These courses include a Geology capstone experience of Geology Field Camp which is normally completed during summer following the junior year. Alternatively, students may opt for an internship (STEM 4890 STEM Internship) experience or a Senior Thesis research experience (GEOL 4830 Senior Thesis).

**COURSE** | **TITLE** | **S.H.**
---|---|---
**FIRST YEAR REQUIREMENT - STUDENT SUCCESS**
YSU 1500 | Success Seminar | 1-2
or SS 1500 | Strong Start Success Seminar | 
or HONR 1500 | Intro to Honors | 
**General Education Requirements**
ENGL 1550 | Writing 1 | 3
or ENGL 1549 | Writing 1 with Support | 
ENGL 1551 | Writing 2 | 3
CMST 1545 | Communication Foundations | 3
Mathematics Requirement (met with MATH in major)
Arts and Humanities (6 s.h.) | 6
Natural Sciences (2 courses, 1 with lab) (6-7 s.h.) | 6
Requirement met through ancillary science courses in the major
Social Science (6 s.h.) | 6
Social and Personal Awareness (6 s.h.) | 6
**Major Requirements**
GEOL 1505 | Physical Geology | 4
& 1505L | Physical Geology Laboratory | 
ENST 2600 | Foundations of Environmental Studies | 4
& 2600L | and Foundations of Environmental Studies Laboratory | 
GEOL 2605 | Historical Geology | 4
GEOL 3700 | Mineralogy | 3
GEOL 3701 | Geomorphology | 3
GEOL 3704 | Structural Geology | 3
GEOL 3704L | Structural Geology Laboratory | 
GEOL 3718 | Igneous and Metamorphic Petrology | 3
GEOL 3750 | Geoscience Seminar | 1
(may be repeated up to four times)
GEOL 5802 | Geochronology and Stratigraphy | 3
GEOG 5810 | Geographic Information Science 1 | 3
**Capstone Experience**
Select one of the following: 4
- GEOL 48XX Field Camp (4 s.h. minimum)
- STEM 4890 STEM Internship (4 s.h. maximum)
- GEOL 4830 Senior Thesis

**Electives**
Select a minimum 8 s.h. of Geology courses, 15 s.h. total: 15
- ENST 3700 Environmental Chemistry
  & 3700L Environmental Chemistry Lab
- GEOL 3702 Glacial Geology
- GEOL 3706 Geology of Economic Mineral Deposits
- GEOL 3709 Subsurface Investigations
- GEOL 3714 Principles of Paleontology
- GEOL 3716 Environmental Impact of Abandoned Mines
- ENST 3751 Water Quality Analysis
  & 3751L Water Quality Analysis Lab
- GEOL 3720 Field Investigations in Geology

**Ancillary Science Courses**
CHEM 1515 | General Chemistry 1 & 1515L and General Chemistry 1 Laboratory | 4
CHEM 1516 | General Chemistry 2 & 1516L and General Chemistry 2 Laboratory | 
MATH 1571 | Calculus 1 | 
MATH 1572 | Calculus 2 | 
or STAT 3717 | Statistical Methods | 
PHYS 1501 | Fundamentals of Physics 1 & 1501L and Fundamentals of Physics Laboratory 1 | 5
PHYS 1502 | Fundamentals of Physics 2 & 1502L and Fundamentals of Physics Laboratory 2 | 
PHYS 2610 | General Physics 1 & 2610L and General Physics Laboratory 1 | 5
PHYS 2611 | General Physics 2 & 2611L and General Physics Laboratory 2 | 

Total Prescribed Semester Hours: 113-114 s.h.

<table>
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<tr>
<th><strong>Year 1</strong></th>
<th><strong>Fall</strong></th>
<th>S.H.</th>
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<tbody>
<tr>
<td>GEOL 1505</td>
<td>Physical Geology &amp; 1505L</td>
<td>4</td>
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<tr>
<td>&amp; 1505L</td>
<td>Physical Geology Laboratory</td>
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<tr>
<td>ENST 2600</td>
<td>Foundations of Environmental Studies</td>
<td>4</td>
</tr>
<tr>
<td>&amp; 2600L</td>
<td>and Foundations of Environmental Studies Laboratory</td>
<td></td>
</tr>
<tr>
<td>GEOL 2605</td>
<td>Historical Geology</td>
<td>4</td>
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<tr>
<td>GEOL 3700</td>
<td>Mineralogy</td>
<td>3</td>
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<tr>
<td>GEOL 3701</td>
<td>Geomorphology</td>
<td>3</td>
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<td>GEOL 3704</td>
<td>Structural Geology</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 3704L</td>
<td>Structural Geology Laboratory</td>
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<tr>
<td>GEOL 3718</td>
<td>Igneous and Metamorphic Petrology</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 3750</td>
<td>Geoscience Seminar</td>
<td>1</td>
</tr>
<tr>
<td>(may be repeated up to four times)</td>
<td></td>
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<tr>
<td>GEOL 5802</td>
<td>Geochronology and Stratigraphy</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 5810</td>
<td>Geographic Information Science 1</td>
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</table>

**Semester Hours**

<table>
<thead>
<tr>
<th><strong>Spring</strong></th>
<th><strong>Semester Hours</strong></th>
<th>15-16</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOL 2605</td>
<td>Historical Geology</td>
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<tr>
<td>ENGL 1551</td>
<td>Writing 1</td>
<td>3</td>
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</tbody>
</table>
or ENGL 1549 | Writing 1 with Support | 
| CHEM 1515 | General Chemistry 1 | 
| & 1515L | and General Chemistry 1 Laboratory | 
| GER Arts and Humanities Elective | 3 |
| GEOL 3750 | Geoscience Seminar | 1 |

<table>
<thead>
<tr>
<th><strong>Year 2</strong></th>
<th><strong>Fall</strong></th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOL 3700</td>
<td>Mineralogy</td>
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<tr>
<td>MATH 1571</td>
<td>Calculus 1</td>
<td>4</td>
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<tr>
<td>GEOL 5810</td>
<td>Geochronology and Stratigraphy</td>
<td>3</td>
</tr>
<tr>
<td>ENST 2600</td>
<td>Foundations of Environmental Studies</td>
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<td>&amp; 2600L</td>
<td>and Foundations of Environmental Studies Laboratory</td>
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| **Semester Hours** | 17 |

<table>
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<th><strong>Spring</strong></th>
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<tbody>
<tr>
<td>GEOL 4804 Ground Water &amp; 4824 Tectonics</td>
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<td>GEOL 4825 Geophysical Well Log Analysis &amp; 4899 Special Topics</td>
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<td>GEOL 5805 Special Problems in Geology</td>
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<td>ENST 5810 Environmental Safety</td>
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<td>GEOL 5810 Groundwater Resource Evaluation</td>
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<tr>
<td>GEOG 5811 Geographic Information Science 2</td>
<td></td>
<td></td>
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<tr>
<td>GEOL 5815 Geology and the Environment 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEOL 5817 Environmental Geochemistry</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENST 5860 Environmental Regulations</td>
<td></td>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Ancillary Science Courses</strong></th>
<th><strong>Total Prescribed Semester Hours: 113-114 s.h.</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1515</td>
<td>General Chemistry 1 &amp; 1515L and General Chemistry 1 Laboratory</td>
</tr>
<tr>
<td>CHEM 1516</td>
<td>General Chemistry 2 &amp; 1516L and General Chemistry 2 Laboratory</td>
</tr>
<tr>
<td>MATH 1571</td>
<td>Calculus 1</td>
</tr>
<tr>
<td>MATH 1572</td>
<td>Calculus 2</td>
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</tbody>
</table>
or STAT 3717 | Statistical Methods | 
| PHYS 1501 | Fundamentals of Physics 1 & 1501L and Fundamentals of Physics Laboratory 1 | 5
| PHYS 1502 | Fundamentals of Physics 2 & 1502L and Fundamentals of Physics Laboratory 2 | 
| PHYS 2610 | General Physics 1 & 2610L and General Physics Laboratory 1 | 5
| PHYS 2611 | General Physics 2 & 2611L and General Physics laboratory 2 | 

| **Total Semester Hours** | 120-121 |
GEOL 3750 Geoscience Seminar (Optional) 1

Spring
GEOL 3718 Igneous and Metamorphic Petrology 4
STAT 3717 or MATH 1572 Statistical Methods or Calculus 2 4
GEOL/ENST Upper Division Elective 3
CMST 1545 Communication Foundations 3

Semester Hours 16

Year 3
Fall
GEOL 3701 Geomorphology 3
PHYS 1501 & 1501L Fundamentals of Physics 1 and Fundamentals of Physics Laboratory 1 5
GER Social Science Elective 3
GEOL/ENST Upper Division Elective 3
GEOL 3750 Geoscience Seminar (Optional) 1

Semester Hours 14

Spring
GEOL 3704 & 3704L Structural Geology and Structural Geology Laboratory 3
PHYS 1502 & 1502L Fundamentals of Physics 2 and Fundamentals of Physics Laboratory 2 4
GER Arts and Humanities 3
GEOL/ENST Upper Division Elective 3
ENST 5810 Environmental Safety 1

Semester Hours 15

Year 4
Fall
GEOL 3750 Geoscience Seminar (Optional) 1
GER Social Personal Awareness 3
GEOL/ENST Upper Division Elective 3
GEOL/ENST Upper Division Elective 3
Elective Course 3

Semester Hours 13

Spring
GEOL 5802 Sedimentology and Stratigraphy 3
GEOL/ENST Upper Division Elective 3
GEOL/ENST Upper Division Elective 3
PHIL 2631 Environmental Ethics (GER Social and Personal Awareness) 3
Elective Course 3

Semester Hours 15

Total Semester Hours 119-120

COURSE TITLE S.H.
GEOL 1505 Physical Geology 4
& 1505L and Physical Geology Laboratory
GEOL 2605 Historical Geology 4
GEOL 3704 Structural Geology 3
& 3704L and Structural Geology Laboratory
GEOL 3706 Geology of Economic Mineral Deposits 3
GEOL 3709 Subsurface Investigations 3
GEOL 4804 Ground Water 3

Total Semester Hours 20

COURSE TITLE S.H.
ENST 2600 Foundations of Environmental Studies 4
& 2600L and Foundations of Environmental Studies Laboratory
Select one of the following: 3
ENST 5800 Environmental Impact Assessment
ENST 5830 Risk Assessment
ENST 5860 Environmental Regulations
Select 12 s.h. of Upper-division Environmental Studies courses. 12

Total Semester Hours 19

COURSE TITLE S.H.
GEOL 1505 Physical Geology 4
GEOL 2605 Historical Geology 4
Select a minimum of 10 semester hours upper division Geology courses. 10

Total Semester Hours 18

Learning Outcomes

The learning outcomes for the Bachelor of Science in Geology are as follows:

• Communicate effectively using the language, concepts, and models of geology in written, visual, and numerical formats.

• Properly apply the scientific method to research a geologic problem and formulate conclusions.

• Demonstrate ability to apply appropriate field- and laboratory-based methods (of acquiring, quantitatively and qualitatively analyzing, and interpreting geologic data and information).

• Demonstrate understanding of plate tectonics regarding the petrologic, stratigraphic, and structural evolution of continents and oceans.
Minor in Natural Gas and Water Resources

**Required Core Courses**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOL 2620</td>
<td>Intro to Natural Gas and Water Resources</td>
<td>3</td>
</tr>
<tr>
<td>ENST 2600 &amp; 2600L</td>
<td>Foundations of Environmental Studies and Foundations of Environmental Studies Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>STEM 2625</td>
<td>Natural Gas and Water Resources Seminar</td>
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</table>

**A. Water Resources and Environmental Management**

Select at least 3 s.h. from group A:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 4801 &amp; 4801L</td>
<td>Environmental Microbiology and Environmental Microbiology Laboratory</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 5888</td>
<td>Environmental Biotechnology</td>
<td></td>
</tr>
<tr>
<td>CCET 3724</td>
<td>Hydraulics and Land Development</td>
<td></td>
</tr>
<tr>
<td>CCET 4824</td>
<td>Environmental Technology</td>
<td></td>
</tr>
<tr>
<td>CEEN 3736</td>
<td>Fundamentals of Environmental Engineering</td>
<td></td>
</tr>
<tr>
<td>CHEM 2604 &amp; 2604L</td>
<td>Quantitative Analysis and Quantitative Analysis Laboratory</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 3719 &amp; 3719L</td>
<td>Organic Chemistry 1 and Organic Chemistry 1 Laboratory</td>
<td></td>
</tr>
<tr>
<td>CHEM 4860</td>
<td>Regulatory Aspects of Industrial Chemistry</td>
<td></td>
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<tr>
<td>CHEM 5804 &amp; 5804L</td>
<td>Chemical Instrumentation and Chemical Instrumentation Laboratory</td>
<td></td>
</tr>
<tr>
<td>ENST 3700 &amp; 3700L</td>
<td>Environmental Chemistry and Environmental Chemistry Lab</td>
<td></td>
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<tr>
<td>CEEN 3751 &amp; 3751L</td>
<td>Water Quality Analysis and Water Quality Analysis Lab</td>
<td>3</td>
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</tbody>
</table>

**B. Natural Gas Production**

Select at least 3 s.h. from group B:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 3730</td>
<td>Oil and Gas Accounting</td>
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</tr>
<tr>
<td>AHLT 4808</td>
<td>Environmental Health Concerns</td>
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</tr>
<tr>
<td>CEEN 3716 &amp; 3716L</td>
<td>Fluid Mechanics and Fluid Mechanics Lab</td>
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</table>

**OR**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
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</thead>
<tbody>
<tr>
<td>MECH 3720 &amp; 3720L</td>
<td>Fluid Dynamics and Fluid Dynamics Laboratory</td>
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<tr>
<td>OR</td>
<td></td>
<td></td>
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<tr>
<td>MET 3714 &amp; 3714L</td>
<td>Fluid Mechanics and Fluid Mechanics Laboratory</td>
<td></td>
</tr>
<tr>
<td>CHEN 2688</td>
<td>Energy Assessment</td>
<td></td>
</tr>
<tr>
<td>GEOG 5810</td>
<td>Geographic Information Science 1</td>
<td></td>
</tr>
<tr>
<td>GEOL 3709</td>
<td>Subsurface Investigations</td>
<td></td>
</tr>
<tr>
<td>GEOL 4825</td>
<td>Geophysical Well Log Analysis</td>
<td></td>
</tr>
<tr>
<td>ISEN 3736</td>
<td>Methods Engineering</td>
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<tr>
<td>ISEN 3736L</td>
<td>Methods Engineering Laboratory</td>
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**STEM 4895 Senior Thesis (Equivalent course may be taken within CSTEM department degree programs)**

<table>
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<tr>
<th>COURSE</th>
<th>TITLE</th>
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<tr>
<td></td>
<td>STEM Internship</td>
<td>1-4</td>
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</tbody>
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**Physics and Astronomy**

Physics and Astronomy
Room 2023 Ward Beecher Science Hall
Youngstown State University
Youngstown, Ohio 44555
(330) 941-3616 Fax: (330) 941-2131
Dr. W. Gregg Sturrus, Chair (wgsturrus@ysu.edu)

**Welcome**

Welcome to the Physics and Astronomy program at YSU! We are proud of the unique opportunities we provide for our students. We are dedicated to the idea that students learn best by doing the activities considered to be the work of physicists and astronomers. Our Ward Beecher Planetarium sports a 40-foot projection dome, a Chronos GOTO Star Projector, and a SciDome HB full-dome digital projector, all of which are maintained and operated by our students. Our physics students also have access to state-of-the-art research equipment in our research labs. This equipment includes an atomic force microscope and an x-ray photoemission spectrometer for surface studies; a photolithography semiconductor mask aligner; magnetron sputtering deposition system and a HeCd laser photoluminescence spectrometer for developing and testing new semiconductor materials and devices; and a Vibrant OPTOtek optical parametric oscillator; an x-ray photoemission spectrometer for surface composition studies; and several pulsed YAG lasers for non-linear optics studies of layered polymer materials.

The astronomy research students learn to use the latest data analysis tools and work with imaging data from telescopes around the world. Students have access to the Ohio Supercomputer Facility do perform simulations studies on solid state systems. Furthermore, the department has an endowment specifically for use to pay students who work as assistants in our research labs. We strive to include students in all our research projects and our planetarium shows, and we are happy to discuss these opportunities with interested students.

**Mission Statement**

The Physics and Astronomy program strives to provide a high quality educational experience for its majors by involving undergraduate students in significant research activities to embody its philosophy of teaching through research; to continue and expand the research footprint of the department and the University; to serve the undergraduate population by offering challenging and essential course work; and to establish connections between the public and the scientific community and between the public and the University through outreach programs.

Courses are organized with the following aims:

- To provide well-rounded training in physics and astronomy for those needing it for graduate study, industry, or for secondary school teaching.
- To provide basic training for engineering and pre-professional students.
- To acquaint students from non-science programs with the methods, applications, and theories of physics and astronomy in the modern world.

The program curricula, four-year plan, and minimum requirements for the degrees of Bachelor of Arts and Bachelor of Science with a major in physics and a Bachelor of Science degree with a combined major in physics and astronomy are available through the links under the Programs of Study tab. These degrees may be earned in eight semesters if students average 15 hours per semester.
Degree Options

The BA degree program in physics is designed for students who are interested in fields that benefit from a strong background in physics or for students planning to terminate their education at the bachelor's degree level. The BS degree program in physics is designed for students who plan to pursue graduate studies in physics or technical positions in an industrial setting. The BS degree program with a combined physics and astronomy major is designed for students who plan to pursue graduate studies in astronomy or space science. For advising questions, please contact us at (330) 941-3616 or wgsturrus@ysu.edu.

Students pursuing the BA degree must complete Foreign Language through the 2600 level.

A student desiring to teach physics or astronomy in secondary schools should consult the dean of the Beeghly College of Liberal Arts, Social Sciences, and Education.

Students are urged to come to the department office early in their first year for advising by the department chair.

For more information, visit the Department of Physics, Astronomy, Geology, and Environmental Sciences.

Chair
William Gregg Sturrus, Ph.D., Professor, Acting Chair
Professor
Snjezana Balaz, Ph.D., Assistant Professor
Michael J. Crescimanno, Ph.D., Professor
Patrick R. Durrell, Ph.D., Professor
John J. Feldmeier, Ph.D., Professor
Tom Nelson Oder, Ph.D., Professor
Donald Priour, Ph.D., Associate Professor

Majors
- BS in Physics with a Minor in Mathematics (p. 505)
- BA in Physics with a Minor in Mathematics (p. 504)
- BS with a Combined Major in Physics and Astronomy and a Minor in Mathematics (p. 506)

Minors
- Physics Minor (p. 507)
- Astronomy Minor (p. 507)

Physics

PHYS 1500 Conceptual Physics 3 s.h.
A conceptual treatment of selected theories and laws of classical and modern physics and their application to the understanding of natural phenomena. The evolution of these laws from hypotheses to functional relationships examined in a historical context. Not applicable to the major in Physics or to the combined major in Physics and Astronomy.
Gen Ed: Natural Science.

PHYS 1500L Conceptual Physics Laboratory 1 s.h.
Experimental work designed to supplement PHYS 1500. Three hours per week.
Prereq. or concurrent: PHYS 1500.

PHYS 1501 Fundamentals of Physics 1 4 s.h.
Topics include kinematics, forces, energy, momentum, rotational kinematics, torque, angular momentum, simple harmonic motion, and mechanical waves. Not recommended for mathematics, chemistry, physics, or engineering majors.
Prereq.: C or better in MATH 1507 or MATH 1510 and MATH 1511, or readiness for MATH 1571 or equivalent, or at least level 40 on the Mathematics Placement Test.
Gen Ed: Natural Science.

PHYS 1501L Fundamentals of Physics Laboratory 1 1 s.h.
Experimental work designed to supplement the PHYS 1501, PHYS 1502 sequence. Three hours per week.
Prereq. or concurrent: PHYS 1501.

PHYS 1501R Fundamentals of Physics 1 Recitation 1 s.h.
Discussion and problem solving based on current material in PHYS 1501.
Concurrent with: PHYS 1501.

PHYS 1502 Fundamentals of Physics 2 3 s.h.
Study of electricity, magnetism, and light. Topics include electric charge, electric forces and fields, electric potential, capacitance and resistance in direct current circuits, basic circuit analysis, magnetic forces and fields, induced emf, inductance, reflections, refraction, geometric optics as applied to lenses and mirrors, interference, and diffraction.
Prereq.: PHYS 1501 or equivalent.
Gen Ed: Natural Science.

PHYS 1502L Fundamentals of Physics Laboratory 2 1 s.h.
Experimental work designed to supplement the PHYS 1501, PHYS 1502 sequence. Three hours per week.
Prereq. or concurrent: PHYS 1502.

PHYS 1506 Physics for Health Care 3 s.h.
The basic laws of physics applied to various biological and physiological problems. Designed for majors in the allied health fields, e.g., Respiratory care. Not applicable to the major in Physics or to the combined major in Physics and Astronomy.

PHYS 1507 Energy and the Environment 3 s.h.
Broad survey of the origin and distribution of the various forms of energy found in nature. Examination of the physical laws governing society's use of energy and environmental consequences resulting therefrom. Not applicable to the major in Physics or to the combined major in Physics and Astronomy.

PHYS 1520H Honors Perspectives in Physics 3 s.h.
Introduction to past and recent ideas in physics with specific emphasis on their impact on historical and contemporary thought. The treatment, largely non-mathematical, is enhanced by selected readings suitable for the beginning honors student in any field. Not applicable to the major in Physics or to the combined major in Physics and Astronomy.
Prereq.: Admission to the Honors Program or permission of instructor and Director of Honors.

PHYS 2601 General Physics for Applied Medical Studies 1 4 s.h.
Description and analysis of motion including kinematics and dynamics of translation and rotation; analysis of equilibrium, energy, and momentum of objects; gravity; mechanical oscillations and waves. This course is designed primarily for students enrolled in the NEO-YSU program or in pre-medical curricula.
Prereq.: MATH 1507 and MATH 1508 or equivalent.
Prereq. or concurrent: MATH 1571, MATH 1581H, or MATH 1585H.
Gen Ed: Natural Science.

PHYS 2602 General Physics for Applied Medical Studies 2 4 s.h.
Description and analysis of electrical and magnetic effects; geometric and physical optics and the wave nature of light; introduction to atomic physics, quantum mechanics, nuclear structure and radiation.
Prereq.: PHYS 2601.
Gen Ed: Natural Science.
PHYS 2607 Physical Science for Middle and Secondary Education 4 s.h.
Selected topics in physical science appropriate to the middle- and secondary- level curriculum. Emphasis on diverse hands-on classroom activities, and multiple approaches to communicating basic concepts in physical science. Topics include simple machines, light and sound, batteries and bulbs, physical properties of solids, liquids and gases.
Prereq.: MATH 1501 or at least level 3 on the Mathematics Placement Test and admission to BCOE upper-division status.
Gen Ed: Natural Science.

PHYS 2608 Sound 3 s.h.
The physical principles accounting for the production, propagation, and perception of sound waves. The relevance of these principles to phenomena ranging from hearing to the operation of various musical instruments. Introduction to auditorium acoustics. This course is designed for Music majors. Not applicable to the Physics major or to the combined Astronomy and Physics major.
Gen Ed: Natural Science.

PHYS 2610 General Physics 1 4 s.h.
A course in mechanics; the kinematics and dynamics of masses in translation and rotation; Newton's Laws; gravity; the conservation laws of energy and momentum; simple harmonic motion and introduction to wave motion and sound.
Prereq.: High school physics or PHYS 1501.
Prereq. or concurrent: MATH 1571.
Gen Ed: Natural Science.

PHYS 2610L General Physics Laboratory 1 1 s.h.
Experimental work designed to supplement the PHYS 2610, 2611 sequence. Three hours per week.
Prereq. or concurrent: PHYS 2610 or PHYS 2601 for PHYS 2610L.

PHYS 2610R General Physics 1 Recitation 1 s.h.
Discussion and problem solving based on current material in PHYS 2610.
Concurrent with: PHYS 2610.

PHYS 2611 General Physics 2 4 s.h.
Study of electric and magnetic fields and their effects; introduction to electric circuits; light as an electromagnetic wave; introduction to geometrical and physical optics.
Prereq.: PHYS 2610.
Prereq. or concurrent: MATH 1572.
Gen Ed: Natural Science.

PHYS 2611L General Physics laboratory 2 1 s.h.
Experimental work designed to supplement the PHYS 2610, 2611 sequence. Three hours per week.
Prereq. or concurrent: PHYS 2611 or PHYS 2602.

PHYS 2617 Physical Science for Middle and High School Teachers 3 s.h.
Selected topics in physical science appropriate to the middle- and secondary- level curriculum. Emphasis on diverse hands-on classroom activities, and multiple approaches to communicating basic concepts in physical science. Topics include motion, forces, simple machines, light and sound, batteries and bulbs, physical properties of solids, liquids and gases.
Prereq.: At least level 35 on the Mathematics Placement Test (ALEKS 46-60) and admission to BCOE upper-division status.
Gen Ed: Natural Science.

PHYS 3703 Classical Mechanics and Dynamics 4 s.h.
Prereq.: PHYS 2611 or ECEN 2633 and prerequisite or concurrent with MATH 3705.

PHYS 3704 Modern Physics 4 s.h.
Special Theory of Relativity. Quantum phenomena related to electromagnetic radiation and material particles. The Bohr model of the hydrogen atom; the Schroedinger equation; the Heisenberg Uncertainty Principle. Wave mechanics of single particles in one-dimensional potentials. Selected topics in atomic, nuclear and condensed matter physics.
Prereq.: PHYS 2611 or ECEN 2633 and prerequisite or concurrent with MATH 2673.

PHYS 3704L Modern Physics Laboratory 1 s.h.
Experimental work designed to supplement PHYS 3704. Three hours per week.
Prereq. or concurrent: PHYS 3704.

PHYS 3705 Thermodynamics and Classical Statistical Dynamics 3 s.h.
Principles and theorems of thermodynamics derived from the observable macroscopic properties related to temperature, heat, and the underlying statistical origins of thermodynamic processes. Includes the laws of thermodynamics, entropy, state functions, differential equations of state, Maxwell relations, and Maxwell-Boltzmann statistics.
Prereq.: PHYS 2611 or ECEN 2633 and prerequisite or concurrent with MATH 2673.

PHYS 3705L Thermodynamics and Classical Statistical Mechanics Laboratory 1 s.h.
Experimental work designed to supplement PHYS 3705. Three hours per week.
Prereq. or concurrent: PHYS 3705.

PHYS 3722 Advanced Optics and Light 3 s.h.
Sources and detection of light; intermediate geometrical and physical optics, including dispersion, scattering, absorption, polarization, coherence, interference, Fresnel and Fraunhoffer diffraction.
Prereq.: MATH 2673 and either PHYS 2611 or ECEN 2633.

PHYS 3722L Advanced Optics Laboratory 1 s.h.
Experimental work designed to supplement PHYS 3722. Three hours per week.
Prereq. or concurrent: PHYS 3722.

PHYS 3730 Electronic Instrumentation 3 s.h.
Laboratory-based course in digital and analog electronics. Topics include AC and DC circuit theory; digital and analog electronics including filters, op amps, counters, digital integrated logic circuits, and A/D and D/A conversion; computer interfacing.
Prereq.: PHYS 2611.

PHYS 3741 Electromagnetic Field Theory 1 3 s.h.
Intermediate theory of electric and magnetic fields. Topics include electric field, scalar potential, techniques for calculating scalar potential (method of images, Laplace's and Poisson's equations, multipole expansion, Green's Function approach), dielectrics and polarization, Maxwell's equations and their application to the propagation of electromagnetic waves including reflection, refraction, transmission, and absorption; guided waves, retarded potentials, radiating systems, special relativity. Must be taken in sequence, before PHYS 3742.
Prereq.: MATH 3705 and either PHYS 2611 or ECEN 2633.

PHYS 3742 Electromagnetic Field Theory 2 3 s.h.
Intermediate theory of electric and magnetic fields. Topics include electric field, scalar potential, techniques for calculating scalar potential (method of images, Laplace's and Poisson's equations, multipole expansion, Green's Function approach), dielectrics and polarization, Maxwell's equations and their application to the propagation of electromagnetic waves including reflection, refraction, transmission, and absorption; guided waves, retarded potentials, radiating systems, special relativity.
Prereq.: PHYS 3741.

PHYS 3750 Mathematical Physics 3 s.h.
The mathematics techniques required in the study of classical, statistical, and quantum mechanics, and field theory.
Prereq.: MATH 3705 and either PHYS 2611 or ECEN 2633.
PHYS 4805 Undergraduate Physics Research 3 s.h.
Research conducted under the direction of a faculty member. The grading is Traditional/PR.
Prereq.: PHYS 3703 and PHYS 3704.
Gen Ed: Capstone.

PHYS 5810 Quantum Mechanics and Quantum Statistical Mechanics 1 3 s.h.
The postulates of wave mechanics, Matrix mechanics, angular momentum coupling, scattering, perturbation theory, intrinsic spin, emission and absorption of radiation. Fermi-Dirac and Bose-Einstein statistics with applications in quantum theory. Must be taken in sequence before PHYS 5811.
Prereq.: PHYS 3703 and PHYS 3704 and MATH 3705.

PHYS 5811 Quantum Mechanics and Quantum Statistical Mechanics 2 3 s.h.
The postulates of wave mechanics, Matrix mechanics, angular momentum coupling, scattering, perturbation theory, intrinsic spin, emission and absorption of radiation. Fermi-Dirac and Bose-Einstein statistics with applications in quantum theory. Must be taken in sequence.
Prereq.: PHYS 5810.

PHYS 5823 Laser Physics and Photonics 3 s.h.
Emission and absorption of radiation, including stimulated emission. Optical cavities and wave guides. Introduction to lasers. Modulation and detection of light. Applications of lasers to information processing and other technologies. Introduction to nonlinear optical and opto-electronic phenomena and nonlinear optical materials.
Prereq.: PHYS 3722.

PHYS 5826 Nuclear Physics 3 s.h.
General properties and behavior of the nucleus; nuclear models; nuclear reactions; radioactivity and decay processes; accelerators; current topics; elementary particles. Laboratory experiments. Prereq. PHYS 3704, PHYS 3704L, and MATH 3705.

PHYS 5830 Condensed Matter Physics 3 s.h.
Selected topics in condensed matter physics: mechanical, thermal, electrical, and magnetic properties of amorphous and crystalline materials; crystal structures.
Prereq.: PHYS 3704.

PHYS 5835 Spectroscopy 3 s.h.
Treatment of atomic, molecular, and nuclear structure based on the analysis of electromagnetic and other spectra.
Prereq.: PHYS 3704.

PHYS 5835L Spectroscopy Laboratory 1 s.h.
Experimental work designed to supplement PHYS 5835. Three hours per week.
Prereq. or concurrent: PHYS 5835.

PHYS 5850 Special Topics in Physics 2-4 s.h.
The study of a standard topic at greater depth, of the development of a correlated background for areas of physical knowledge, or the physical and educational experimentation necessary to develop new physics courses. May be repeated twice.
Prereq.: Senior standing in Physics, Electrical Engineering, or Education.

PHYS 5850G Selected Topics Computational Methods for Problems in Physical Sciences 2-4 s.h.
The study of a standard topic at greater depth, of the development of a correlated background for areas of physical knowledge, or the physical and educational experimentation necessary to develop new physics courses. May be repeated twice.
Prereq.: Senior standing in Physics, Electrical Engineering, or Education.

PHYS 5890 Physics and Astronomy for Educators 1-4 s.h.
Intensive study of selected topics of current interest in Physics education. Not applicable to the major in Physics or the combined Astronomy and Physics major. May be repeated for different topics.
Prereq.: Admission to upper-division status in the College of Education or to the Graduate School.

Astronomy

ASTR 1504 Descriptive Astronomy 3 s.h.
Scientific method, introduction to modern understanding of the universe, astronomy and society. Humanity’s place in the universe. Astronomical observing methods, the solar system, stars and star systems, galaxies, cosmology. Recent astronomical discoveries.
Gen Ed: Natural Science.

ASTR 1504L Astronomy Laboratory 1 s.h.
Telescope and Planetarium laboratory work designed to supplement ASTR 1504. Measurement techniques and deductive methods to determine distance and size of astronomical objects. Three hours per week.
Prereq. or concurrent: ASTR 1504.

ASTR 2609 Moon and Planets 3 s.h.
A detailed discussion of the moon and planets, with particular emphasis on the geology of the moon.
Prereq.: ASTR 1504 or GEOL 1505.

ASTR 3711 Astrophysics 1 3 s.h.
The application of physical principles to the study of stars and stellar structure; stellar distances and dimensions; stellar spectra and chemical composition; nuclear reactions and the evolution of stars; star formation and the end states of stars.
Prereq.: PHYS 2611 and MATH 2673.

ASTR 3712 Astrophysics 2 3 s.h.
The application of physical principles to the study of the Milky Way and other galaxies; including stellar populations; galactic structure; galaxy interactions; galactic distances and large scale structure of the universe; introduction to cosmology.
Prereq.: ASTR 3711.

ASTR 4811 Observational Astronomy 1 3 s.h.
Photoelectric photometry, photographic and CCD imaging techniques, spectroscopy, methods of data reduction. Some night observatory work included.
Prereq.: PHYS 2611 and MATH 2673.

ASTR 4812 Observational Astronomy 2 3 s.h.
Photoelectric photometry, photographic and CCD imaging techniques, spectroscopy, methods of data reduction. Some night observatory work included.
Prereq.: PHYS 2611 and MATH 2673.

ASTR 4815 Undergraduate Astronomy Research 3 s.h.
Research conducted under the direction of a faculty member. The grading is Traditional/PR.
Prereq.: PHYS 3703 and PHYS 3704.
Gen Ed: Capstone.

Learning Outcomes
The Department of Physics and Astronomy helps students in the departmental programs develop skills to acquire and demonstrate knowledge in classical mechanics, modern physics, electricity and magnetism, thermodynamics, quantum mechanics, and astrophysics. The learning outcomes for the BA Program in Physics are:

- Students will learn to model physical systems and interpret experimental and theoretical results.
- Students will learn how to measure the physical properties of systems using a variety of test equipment and defend the results of their measurements using the associated accuracy and precision of these measurements.
- Students will learn to apply the concepts of classical physics, modern physics, thermodynamics, and electrostatics to solve problems and predict numerical results.

In addition to the learning outcomes for the BA program in physics, students of the BS program in physics will further learn to apply the concepts of
electrodynamics and quantum mechanics to solve problems and predict numerical results.

In addition to the learning outcomes for the BA program in physics, students of the BS program in physics and astronomy will learn to apply the concepts of astrophysics to solve problems and predict numeric results.

**Bachelor of Arts in Physics**

**Minimum requirements for the B.A. degree in Physics with a minor in mathematics**

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<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
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<td><strong>FIRST YEAR REQUIREMENT - STUDENT SUCCESS</strong></td>
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<tr>
<td>YSU 1500</td>
<td>Success Seminar</td>
<td>1-2</td>
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21 additional hours of upper division electives and 5 hours of electives at any level are required

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| **Fall** | | |
| YSU 1500 | Success Seminar | 1 |
| PHYS 2610 | General Physics 1 & 2610L and General Physics Laboratory 1 (P, NS) | 5 |
| ENGL 1550 | Writing 1 or ENGL 1549 or Writing 1 with Support | 3-4 |
| CHEM 1515 | General Chemistry 1 & 1515L and General Chemistry 1 Laboratory (NS) | 4 |
| MATH 1571 | Calculus 1 (P) | 4 |
| **Semester Hours** | 17-18 |
| **Spring** | | |
| PHYS 2611 | General Physics 2 & 2611L and General Physics Laboratory 2 (P, NS) | 5 |
| CHEM 1516 | General Chemistry 2 & 1516L and General Chemistry 2 Laboratory (P, NS) | 4 |
| MATH 1572 | Calculus 2 (P) | 4 |
| First-Year Experience Course | | 3 |
| **Semester Hours** | 16 |
| **Year 2** | | |
| **Fall** | | |
| PHYS 3704 | Modern Physics & 3704L and Modern Physics Laboratory (P) | 5 |
| MATH 2673 | Calculus 3 (P) | 4 |
| FNGL 1550 | Elementary Foreign Language | 4 |
| ENGL 1551 | Writing 2 | 3 |
| **Semester Hours** | 16 |
| **Spring** | | |
| PHYS 3705 | Thermodynamics and Classical Statistical Dynamics & 3705L and Thermodynamics and Classical Statistical Mechanics Laboratory (P) | 4 |
| MATH 3705 | Differential Equations (P) | 3 |
| FNGL 2600 | Intermediate Foreign Language | 4 |
| Arts & Humanities GER Domain | | 3 |
| **Semester Hours** | 14 |
| **Year 3** | | |
| **Fall** | | |
| PHYS 3703 | Classical Mechanics and Dynamics (P) | 4 |
| PHYS 3741 | Electromagnetic Field Theory 1 (P) | 3 |
| Social Sciences GER Domain | | 3 |
| Upper Division Math (P) | | 3 |
| CMST 1545 | Communication Foundations | 3 |
| **Semester Hours** | 16 |
| **Spring** | | |
| Arts & Humanities GER Domain | | 3 |
| Elective | | 4 |
| Physics upper division Elective | | 3 |
| Social Sciences GER Domain | | 3 |
| **Semester Hours** | 13 |
| **Year 4** | | |
| **Fall** | | |
| PHYS 4805 | Undergraduate Physics Research (Capstone, P) | 3 |
Bachelor of Science in Physics
Minimum requirements for the B.S. in Physics

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Youngstown State University Undergraduate
Art & Humanities GER Domain 3

Semester Hours 16

Spring
ECEN 2614 Basics of Electrical Engineering 3
PHYS 3742 Electromagnetic Field Theory 2 (P) 3
Math Elective (Upper Division) 3
Social Sciences GER Domain 3

Semester Hours 12

Year 4
Fall
PHYS 4805 Undergraduate Physics Research 3
PHYS 5810 Quantum Mechanics and Quantum Statistical Mechanics 1 (P) 3
Electives (Upper Division) 8

Semester Hours 14

Spring
PHYS 5811 Quantum Mechanics and Quantum Statistical Mechanics 2 (P) 3
Social & Personal Awareness GER Domain 3
Elective (Upper Division if CSIS 2610; any level if CIS 3735) 3
Electives at any level: 6 hours if CSIS 2610; 7 hours if CIS 3735 6-7

Semester Hours 15-16

Total Semester Hours 121-122

Bachelor of Science with a Combined Major in Physics and Astronomy and a Minor in Mathematics

Minimum requirements for the BS with a combined major in physics and astronomy and a minor in mathematics

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Total Semester Hours 120-121

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<td>ENGL 1550</td>
<td>Writing 1</td>
<td>3-4</td>
</tr>
<tr>
<td>or ENGL 1549</td>
<td>or Writing 1 with Support</td>
<td></td>
</tr>
</tbody>
</table>

Semester Hours 16-17

Spring
ASTR 2609 | Moon and Planets | 3 |
PHYS 2611 & 2611L | General Physics 2 and General Physics laboratory 2 (P) | 5 |
MATH 1572 | Calculus 2 (P) | 4 |
First-Year Experience Course | 3 |

Semester Hours 15

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Year 2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fall</td>
<td></td>
</tr>
<tr>
<td>PHYS 3704 &amp; 3704L</td>
<td>Modern Physics and Modern Physics Laboratory (P)</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 1515</td>
<td>General Chemistry 1</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 1515L</td>
<td>General Chemistry 1 Laboratory</td>
<td>0</td>
</tr>
<tr>
<td>MATH 2673</td>
<td>Calculus 3 (P)</td>
<td>4</td>
</tr>
</tbody>
</table>

Total Semester Hours 120-121
ENGL 1551 Writing 2 3

**Semester Hours 16**

**Spring**
CHEM 1516 General Chemistry 2 4 & 1516L and General Chemistry 2 Laboratory (P; NS)
MATH 3705 Differential Equations (P) 3
CMST 1545 Communication Foundations 3
CSIS 2610 Programming and Problem-Solving 4

**Semester Hours 14**

**Year 3**
**Fall**
PHYS 3703 Classical Mechanics and Dynamics (P) 4
PHYS 3741 Electromagnetic Field Theory 1 (P) 3
ASTR 3711 Astrophysics 1 (P) 3
Physics Elective (Upper Division) 3
Social Sciences GER Domain 3

**Semester Hours 16**

**Spring**
PHYS 3705 & 3705L Thermodynamics and Classical Statistical Dynamics and Thermodynamics and Classical Statistical Mechanics Laboratory (P) 4

Physics Elective (Upper Division) 3
ASTR 3712 Astrophysics 2 (P) 3
Arts & Humanities GER Domain 3
Social & Personal Awareness GER Domain 3

**Semester Hours 16**

**Year 4**
**Fall**
ASTR 4811 Observational Astronomy 1 3
ASTR 4815 Undergraduate Astronomy Research (Capstone) 3
Upper Division elective 3
Arts & Humanities Elective GER Domain 3
Social Sciences Elective GER Domain 3

**Semester Hours 15**

**Spring**
ASTR 4812 Observational Astronomy 2 (P) 3
Math Elective (Upper Division) 3
Electives (Upper Division) 2
Electives 2
Social & Personal Awareness GER Domain 3

**Semester Hours 13**

**Total Semester Hours 121-122**

**Minor in Astronomy**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTR 2609</td>
<td>Moon and Planets</td>
<td>3</td>
</tr>
</tbody>
</table>

Students must complete ASTR 1504 or GEOL 1505 as prerequisite for ASTR 2609

The following four courses require PHYS 2611 and MATH 2673 as prerequisites:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTR 3711</td>
<td>Astrophysics 1</td>
<td>3</td>
</tr>
<tr>
<td>ASTR 3712</td>
<td>Astrophysics 2</td>
<td>3</td>
</tr>
<tr>
<td>ASTR 4811</td>
<td>Observational Astronomy 1</td>
<td>3</td>
</tr>
<tr>
<td>ASTR 4812</td>
<td>Observational Astronomy 2</td>
<td>3</td>
</tr>
</tbody>
</table>

Prerequisites courses PHYS 3703 and PHYS 3704 are required for ASTR 4815
ASTR 4815 Undergraduate Astronomy Research 3

**Total Semester Hours 18**

**Minor in Physics**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 2610 &amp; 2610L</td>
<td>General Physics 1 and General Physics Laboratory 1</td>
<td>5</td>
</tr>
<tr>
<td>PHYS 2611 &amp; 2611L</td>
<td>General Physics 2 and General Physics laboratory 2</td>
<td>5</td>
</tr>
</tbody>
</table>

Select & s.h. of upper division physics electives. 8

**Total Semester Hours 18**

1 Upper division elective hours may be substituted for PHYS 2610L General Physics Laboratory 1 and/or PHYS 2611L General Physics laboratory 2 for students majoring in engineering or a natural science.

**Rayen School of Engineering Accreditation**

The baccalaureate degree programs in the Rayen School of Engineering accredited by the Engineering Accreditation Commission (EAC) of ABET (http://www.abet.org) are:

- chemical engineering (jointly accredited by the American Institute of Chemical Engineers)
- civil engineering
- electrical engineering
- industrial and systems engineering
- mechanical engineering

**School of Engineering Disqualification**

A student who earns two grades of D, F, or NC in the same course(s) listed below will be disqualified from transferring into a degree-granting engineering major. These courses are:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1513</td>
<td>Algebra and Transcendental Function</td>
<td>5</td>
</tr>
<tr>
<td>MATH 1571</td>
<td>Calculus 1</td>
<td>4</td>
</tr>
<tr>
<td>ENGL 1540</td>
<td>Introduction to College Writing</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 1550</td>
<td>Writing 1</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 1515 &amp; 1515L</td>
<td>General Chemistry 1 and General Chemistry 1 Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 26010</td>
<td>General Physics 1</td>
<td>4</td>
</tr>
</tbody>
</table>

**Enrollment in Restricted Engineering Courses**

Enrollment in most engineering courses is restricted to those admitted to a degree-granting engineering major. A few engineering courses are not restricted. They are:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 1500</td>
<td>Engineering Orientation</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 1550</td>
<td>Engineering Concepts</td>
<td>2</td>
</tr>
<tr>
<td>ENGR 1560</td>
<td>Engineering Computing</td>
<td>2</td>
</tr>
<tr>
<td>CEEN 2610 &amp; 2610L</td>
<td>Surveying and Surveying Laboratory</td>
<td>4</td>
</tr>
</tbody>
</table>

Enrollment in Restricted Engineering Courses
All other courses require admission to a professional engineering major unless approved by the chair of the engineering department and coordinator of the engineering program offering the course and by the STEM College dean. Students will be administratively withdrawn from restricted courses in which they are improperly enrolled.

**Bachelor of Engineering Degree (BE)**

Graduation Policies

All engineering programs have pre-college course requirements listed in the chart at the end of this section that should be completed in high school or in equivalent course work at the college level. YSU offers the equivalent high school courses for those not meeting these pre-college requirements. These high school deficiencies do not count toward graduation requirements and should be completed during the first two years of enrollment.

Each engineering program has minimum graduation requirements. These requirements can affect a student’s enrollment in senior-level classes. If a senior-level student reaches a point where it is not possible to achieve graduation requirements, further enrollment in engineering classes will be denied. In addition to the overall recalculated C average required by the University, an unrecalculated C average in the major is required. Also, an unrecalculated C average in all engineering courses is required in all majors. These minimum graduation requirements are referred to as a **triple C** requirement.

**Chemical Engineering**

A student who is failing to meet the triple C requirement prior to the senior year will be denied enrollment in CHEN 4887 Process and Plant Design 1.

**Civil and Environmental Engineering**

A student who is failing to meet the triple C requirement prior to the senior year will be denied enrollment in:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEEN 4863</td>
<td>Integrated Design Project</td>
<td>3</td>
</tr>
<tr>
<td>CEEN 5837</td>
<td>Environmental Engineering Design</td>
<td>3</td>
</tr>
<tr>
<td>CEEN 5855</td>
<td>Reinforced Concrete Design</td>
<td>3</td>
</tr>
<tr>
<td>CEEN 4881</td>
<td>Geotechnical Engineering</td>
<td>3</td>
</tr>
</tbody>
</table>

**Electrical and Computer Engineering**

Students who have not earned a C or better grade in ECEN 3741 Electromagnetic Fields 1 and ECEN 3742 Electromagnetic Fields 2 and students who are failing to meet the triple C requirement will be denied enrollment in senior level courses.

**Industrial and Systems Engineering**

A student who is failing to meet the triple C requirement will be denied enrollment in 4000- and 5000-level ISEN courses.

**Mechanical Engineering**

A student who is failing to meet the triple C requirement will be denied permission to register in any junior level mechanical engineering course until remedial measures, as required by the department chair, are agreed to by the student. Also, at the end of the junior year, the student will be denied permission to register in MECH 4808 Mechanical Systems Design 1, MECH 4808L Mechanical Systems Design Laboratory, and MECH 4809 Mechanical Systems Design 2, until the triple C requirement is met.

**Cooperative Education/Professional Practice**

Several programs leading to a baccalaureate degree offer students an optional cooperative education program. Co-op students are required to complete the same academic program for graduation as those not participating in the cooperative education experience. Credit hours awarded for the cooperative education experience are considered “add-on” hours to the degree. Professional practice opportunities include working with faculty on grants and research projects as well as internship opportunities with local industry. A professional practice coordinator is available to assist in student placement.

The table below shows the minimum pre-college requirements:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Algebra 1 and 2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Geometry</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Trigonometry</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Chemistry</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Physics</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>6.5</td>
<td></td>
</tr>
</tbody>
</table>

For more information, visit the Rayen School of Engineering.

**Civil/Environmental and Chemical Engineering**

In Fall 1998, the Department of Civil and Environmental Engineering was combined with the Department of Chemical Engineering to form the Department of Civil/Environmental and Chemical Engineering. The department housed two distinct programs—Civil Engineering (CE) and Chemical Engineering (Che)—with separate faculty lines dedicated to each program. Both programs offer BE and MS degrees.

In Fall 2020, the department joined the other engineering programs in the YSU Rayen School of Engineering.

For more information on each program, visit the College of Science, Technology, Engineering and Mathematics (http://www.ysu.edu/academics/science-technology-engineering-mathematics/).

**Professor**

- Pedro Cortes, Ph.D., Associate Professor
- Richard Albert Deschenes, Jr., Ph.D., Assistant Professor
- Sahar Ehsani, Ph.D., Assistant Professor
- Jeanette M. Garr, Ph.D., Professor
- Shakir Husain, Ph.D., Professor
- AKM Anwarul Islam, Ph.D., Professor
- Holly J. Martin, Ph.D., Associate Professor
- Byung-Wook Park, Ph.D., Assistant Professor
- Douglas M. Price, Ph.D., Associate Professor
- Suresh Sharma, Ph.D., Associate Professor
Majors

- Chemical Engineering Program (p. 512)
- Civil Engineering Program (p. 517)

Civil and Environmental Engineering

CEEN 2601 Statics 3 s.h.
Principles of engineering mechanics as applied to statics with vector applications to forces and moments; centroid and center of gravity; equilibrium; friction; moments of inertia: relationship between loads, stress and strain in tension, compression, torsion and bending.
Prereq.: MATH 1572 or MATH 1572H; PHYS 2610 or concurrent.

CEEN 2602 Strength of Materials 3 s.h.
Relationships between loads, shear and bending moments in beams; combined stresses in beams; indeterminate beam analysis; virtual load; connections; columns.
Prereq.: CEEN 2601.

CEEN 2602L Strength of Materials Lab 1 s.h.
Experimental verification of strength of materials; testing: tension, torsion, non-destructive tests of steel; concrete compression and Poisson ration, wood tests.
Coreq.: CEEN 2602.

CEEN 2610 Surveying 3 s.h.
The theory of surveying and the use of instruments. Problems in leveling, traversing, and topography. Introduction to circular and vertical curves.
Prereq.: MATH 1513 or equivalent.

CEEN 2610L Surveying Laboratory 1 s.h.
Field surveying principles and techniques. Uses of transit and level are stressed. Three laboratory hours per week.
Coreq.: CEEN 2610.

CEEN 2660 Computer Aided Design and Drafting 2 s.h.
This course is designed for students who wish to be involved with the civil engineering design fields and for those interested in computer aided design and drafting. Students will be introduced to both traditional and computer aided design and drafting skills. The aim of this course is to introduce students to basic information, skills, and concepts related to drafting and design. Special attention is given to: sketching, measurement, room planning, multi-view drawing, auxiliary views, working drawings, sectional views, orthographic drawings along with AutoCAD tools and commands. The course includes 1 s.h. lecture and 1 s.h. lab.

CEEN 3710 Civil Engineering Materials 3 s.h.
A study of the principal materials used for civil engineering and construction purposes, with special attention paid to physical and mechanical properties of the materials and their importance to the engineer.
Prereq.: CEEN 2602.

CEEN 3711 Technology and Society 3 s.h.
A critical exploration of how societal needs affect the creation of technologies and how technology affects society. The course is interdisciplinary in nature and presents various approaches to examining the complex interaction between humans and their tools. Topics include: (1) technology in human history; (2) society, science, and technology development; (3) technology and social change; (4) technology, knowledge, and power; (5) technology, population, and the environment. Listed also as SOC 3789.
Prereq.: Junior standing or consent of instructor.

CEEN 3716 Fluid Mechanics 3 s.h.
Proportions of fluids, fluid statics, kinematics; Bernoulli equation; fluid momentum; laminar and turbulent flow through simple pipes; boundary layers; dimensional analysis and similitude.
Prereq.: CEEN 2602.

CEEN 3716L Fluid Mechanics Lab 1 s.h.
Experimental verification of the principles of fluid mechanics as applied to incompressible fluid. Three hours laboratory per week.
Prereq.: CEEN 2602.
Coreq.: CEEN 3716.

CEEN 3717 Hydraulic Design 4 s.h.
Analysis of flow in complex pipe systems; pumps, open channel flow, culverts; spillways; storm water drainage. Three hours lecture and three hours of computational laboratory per week.
Prereq.: CEEN 2610 and CEEN 3716.

CEEN 3720 Transportation Engineering 3 s.h.
Introductory survey of transportation topics including transportation systems, vehicular operation and control, and transportation planning techniques; introduction to design of highways, airports, and railroads; and traffic engineering.
Prereq.: CEEN 2610.

CEEN 3736 Fundamentals of Environmental Engineering 3 s.h.
Causes and effects of water, air and land pollution; measurements of environmental quality; environmental regulations; introduction to methods of pollution control.
Prereq.: CHEM 1515.

CEEN 3749 Structural Analysis 1 3 s.h.
The determination of shears, moments, and stresses in statically determinate beams, frames, and trusses. Consideration of dead, live, moving, and wind loads. Elastic deflections of simple structures. Introduction to the analysis of statically indeterminate structures using numerical and energy methods.
Prereq.: CEEN 2602.

CEEN 3749L Structural Analysis 1 Lab 1 s.h.
Introduction to stiffness-based analysis of determinate and indeterminate structures. Computer analysis of various structural systems, including plane and space trusses, continuous beams, plate and space frames, plates. P-delta stability analysis of frames. Three hours computational lab per week.
Prereq.: CEEN 2602; concurrent with CEEN 3749.

CEEN 3751 Water Quality Analysis 3 s.h.
Introduction to physical, chemical, and biological measurements of water quality. Sample collection and laboratory analysis of natural waters, drinking water, and wastewater. Interpretation of environmental data. Two hours lecture and three hours laboratory per week. Identical to ENST 3751.
Prereq.: CEEN 3736 or ENST 2600; CHEM 1515.

CEEN 3751L Water Quality Analysis Lab 0 s.h.
Laboratory experience in the analysis of natural waters, drinking water and wastewater. Emphasizes procedures for the collection and interpretation of data on current environmental problems. Three hours laboratory per week. Must be taken concurrently with CEEN 3751.

CEEN 4800 Special Topics 3 s.h.
Special topics and new developments in Civil Engineering. Subject matter, credit hours, and special prerequisites to be announced in advance of each offering. May be repeated to a maximum of 6 s.h.
Prereq.: Senior standing or consent of instructor.

CEEN 4812 Construction Management 3 s.h.
Fundamentals of construction management: contracts, bonding, estimating, organization, finance; cost and productivity of equipment, material, and labor; and project planning and scheduling.
Prereq.: CEEN 3717 or CEEN 4881.

CEEN 4835 Highway Design 3 s.h.
Methods of highway route location; design methods and standards for highways, intersections, freeways, and interchanges. Includes extensive use of computer-aided design.
Prereq.: CEEN 3720.
CIEE 4856 Steel Design 3 s.h.
An introduction to the behavior and design of steel structures. Includes the
design of rolled and built-up tension members, beams, columns, beam-
columns, welded and bolted connections.
Prereq.: CEEN 3749.

CIEE 5869 Design of Air Pollution Control Systems 3 s.h.
Engineering analysis, procedures, and techniques for the selection,
applications and operation of air pollution control methods in various
operational situations.
Prereq.: CEEN 3736.

CIEE 5877 Systems Engineering and Project Management 3 s.h.
Systems approach to engineering design; non-linear models; linear
programming; dynamic programming; network analysis; project management.
Prereq.: MATH 3705.

CIEE 5880 Advanced Hydraulics 3 s.h.
Application of hydraulic principles for one dimensional river modeling;
understanding the fundamental processes of open channel hydraulics;
application of HEC-RAS/HEC-GeoRAS models for river system modeling.
Prereq.: A "C" or better in CEEN 3717.

CIEE 5882 Foundation Engineering 3 s.h.
Analysis and design of various foundations, including abutments, piers, piles,
and footings; slope stability of embankments.
Prereq.: CEEN 4881 and CEEN 5855.

CIEE 5883 Bridge Engineering 3 s.h.
Analysis and design of concrete and steel bridges; specifications and code
requirements; design detailing; effects of natural and man-made hazards on
bridges; implications of bridge failures.
Prereq.: CEEN 5855 and CEEN 5856.

CIEE 5884 Solid and Hazardous Waste Management 3 s.h.
Sources, characteristics, handling and disposal options for solid waste
and hazardous waste; topics include regulations, health effects, waste
minimization, collection systems, landfill design, treatment and processing
methods, and site assessment.
Prereq.: CEEN 3736.

Chemical Engineering
CHEN 2650 Computer Methods in Chemical Engineering 2 s.h.
Application of computational software packages and spreadsheets to solve
chemical engineering problems. Utilization of process simulation packages.
Real-time computing applications in laboratory automation.
Prereq.: ENGR 1550, ENGR 1550H or consent of instructor.

CHEN 2683 Chemical Engineering Principles 1 3 s.h.
Engineering units and dimensions. Hydrostatics. Material balances for non-
reacting and reacting processes. Ideal and non-ideal gas relationships. Ideal
multi-phase equilibrium calculations.
Prereq.: MATH 1571, MATH 1571H or MATH 1585H, CHEM 1515.

CHEN 2684 Chemical Engineering Principles 2 3 s.h.
Energy balances on reacting and non-reacting processes. Utilization of energy
balances on multi-phase processes. Mass and energy balances on transient
processes.
Prereq.: CHEN 2683.

CHEN 2688 Energy Assessment 3 s.h.
Concept of energy assessment. Technology of energy production that includes
cogasification, liquefaction, magnetohydrodynamics, utilization of shale oil,
solar, geothermal, and chemical energy. Nuclear energy utilization. Fuel from
wastes. Energy resource distribution and future supply and demand. Simple
calculations relating to fuel saving, production, and consumption. Primarily for
non-engineering students.
CHEN 3700 Measurements and Instrumentation 3 s.h.
Sensors, measurements, and instrumentation are the cornerstones of hands-on learning in engineering, which prepares students for careers and advanced research. This course is much more about measurement science than about computer science or scientific computing. It helps students make the most productive use of computers in the engineering research laboratory. Understand and implement the techniques of computer-based real-time instrumentation and design operational and analytical software using Laboratory Virtual Instrument Engineering Workbench (LabVIEW) for Data Acquisition (DAQ) device and simulation of engineering laboratory measurement instruments. Measure physical and chemical properties with various sensors and interfacing LabVIEW and DAQ device.
Prereq.: CHEN 2683.

CHEN 3718 Women, Science, and Technology 3 s.h.
An overview of the role women have played in scientific and technological advances. Problems unique to women entering scientific professions will be addressed, information about scientific and technical careers and job opportunities and contacts with professionals in the community will be provided.
Prereq.: ENGL 1550.

CHEN 3721 Engineering Plastics 3 s.h.
Preparation, characterization, manufacture, properties and applications of commercial polymers.
Prereq.: CHEN 2684 and CHEM 3719; or consent of instructor.

CHEN 3726 Elementary Nuclear Reactor Engineering 3 s.h.
Basic engineering science to serve as background material for nuclear reactor design. Nuclear fission as an energy source. Reactor use and classification. Comprehensive discussion of reactor design problems such as neutron distribution in the core, type of moderator, heat removal, and radiation protection.
Prereq.: MATH 2673, PHYS 2610.

CHEN 3771 Chemical Engineering Thermodynamics 1 3 s.h.
Development of the concepts and formalisms of thermodynamics and their applications to chemical engineering systems. Real and ideal behavior of single and multicomponent systems. Introduction to the thermodynamics of phase equilibria. Analysis and design of thermal systems. Additional topics include applications in transport phenomena and plant design.
Prereq.: MATH 2673 or MATH 2686H and CHEN 2684.

CHEN 3785L Transport Phenomena Laboratory 1 s.h.
Experimental studies of transport properties and momentum, energy and mass transfer using industrial type equipment. Correlation of data and comparison with theory. Oral presentations and preparation of technical reports. Three hours laboratory.
Prereq.: CHEN 3786 or concurrent.

CHEN 3786 Transport Phenomena 1 4 s.h.
Mathematical formulation of conversion laws. Dimensional analysis. Mechanism and fundamentals of momentum and energy transfer with selected applications to analysis and design of chemical engineering equipment. Three hours lecture and three hours computational lab per week.
Prereq.: MATH 2673 or MATH 2686H and CHEN 2684.

CHEN 3787 Transport Phenomena 2/Unit Operations 1 3 s.h.
Mass transfer processes. Diffusional operations and separation processes with emphasis on evaporation, humidification and drying. Derivation of design equations from mass and energy balances, and application to equipment design. Solution of simultaneous differential equations of mass, momentum, and energy.
Prereq.: CHEN 3786.

CHEN 3787L Unit Operations Laboratory 1 1 s.h.
Experiments in absorption, cascade operations, reaction kinetics, mixing and other chemical engineering operations employing industrial and pilot plant size equipment and instrumentation. Treatment of experimental data, correlations and comparison with theory. Oral presentations and preparation of technical reports. Three hour laboratory.
Prereq.: CHEN 3787.

CHEN 4801 Chemical Engineering Projects 3 s.h.
Chemical engineering projects under the guidance of a faculty member. Literature search, design and construction of apparatus, experimentation and preparation of a comprehensive report.
Prereq.: Consent of instructor.

CHEN 4802 Chemical Engineering Projects 3 s.h.
Chemical engineering projects under the guidance of a faculty member. Literature search, design and construction of apparatus, experimentation and preparation of a comprehensive report.
Prereq.: Consent of instructor.

CHEN 4803 Chemical Engineering Projects 3 s.h.
Chemical engineering projects under the guidance of a faculty member. Literature search, design and construction of apparatus, experimentation and preparation of a comprehensive report.
Prereq.: Consent of instructor.

CHEN 4815 Unit Operations 2 3 s.h.
Gas absorption and desorption, interphase mass transfer processes, liquid extraction and leaching. Physical separation processes including filtration, settling, and size reduction. Derivation of the design equations for the above processes, and applications of the design equations to equipment design.
Prereq.: CHEN 3787.

CHEN 4815L Unit Operations Laboratory 2 1 s.h.
Experiments in absorption, cascade operations, reaction kinetics, mixing and other chemical engineering operations employing industrial and pilot plant size equipment and instrumentation. Treatment of experimental data, correlations and comparison with theory. Oral presentations and preparation of technical reports. Three hour laboratory.
Prereq.: CHEN 4815.

CHEN 4815R Unit Operations 2 Applications 1 s.h.
Utilizing computer programs for gas absorption and desorption, interphase mass transfer processes, liquid extraction and leaching. Includes applications of the design equations to equipment design.
Prereq.: CHEN 3787.

CHEN 4822 Reinforced Polymer Structures 3 s.h.
Survey of raw materials, manufacturing methods, and design of products utilizing reinforcing materials combined with an elastomer or polymer binder.
Prereq.: CHEN 2684 or consent of instructor.

CHEN 4840 Biochemical Engineering Fundamentals 3 s.h.
Design of biological reactors, bioremediation schemes, methods for the purification and mass production of chemical species from living organisms or cultures, extraction, and fermentation. Technologies and processing of recombinant DNA, antibiotics, antibodies, vitamins, steroids, and methane are included. Essentials of microbiology, biochemistry, and genetics will precede industrial applications. Prereq.: junior standing.
Prereq.: CHEN 2684 or consent of instructor.

CHEN 4880 Chemical Reactor Design 1 3 s.h.
Chemical reaction equilibria. Theoretical developments and methods of interpreting experimental data pertaining to chemical kinetics. General design principles and construction features of reactors with application of these principles to the design of specific reactors.
Prereq.: CHEN 3771.

CHEN 4880R Reactor Design Applications 1 s.h.
Utilizing computer programs for determination of chemical reaction equilibria, chemical kinetics, and designing reactors.
Prereq.: CHEN 3771.

CHEN 4881 Chemical Reactor Design 2 3 s.h.
Chemical reaction equilibria. Theoretical developments and methods of interpreting experimental data pertaining to chemical kinetics. General design principles and construction features of reactors with application of these principles to the design of specific reactors.
Prereq.: CHEN 4880.
CHEN 4882 Process Dynamics 3 s.h.
Introduction to automatic control and control loop concepts. Laplace transform techniques. Linear open-loop and closed-loop systems. Root-locus and frequency response methods. Design of control systems.
Prereq.: CHEN 3786.

CHEN 4887 Process and Plant Design I 3 s.h.
An examination of engineering economic analysis to include: cost estimation, profitability, optimum design, principles of fixed and operating costs, materials and site selection, and general and specialized design techniques.
Prereq.: CHEN 3787 Minimum grade of C, CHEN 4880 Minimum grade of C and unrecalculated GPA of 2.0 or better in major courses.

CHEN 4888 Process and Plant Design II 3 s.h.
The application of chemical engineering and cost principles to the component design and selection of process equipment. The application of chemical engineering and cost principles to the design of chemical plants and processes including societal aesthetic, environmental, and safety considerations.
Prereq.: CHEN 4887 minimum grade of C.

CHEN 5800 Special Topics 1-4 s.h.
Special topics and new developments in chemical engineering. Subject matter, credit hours, and special prerequisites to be announced in advance of each offering.
Prereq.: Consent of instructor.

CHEN 5805 Principles of Biomedical Engineering 3 s.h.
Application of engineering principles and methods of analysis to processes in the human body. Rheological, physical and chemical properties of body fluids. Dynamics of the circulatory system. The human thermal system. Transport through cell membranes. Analysis and design of artificial organs.
Prereq.: CHEN 2684 or consent of instructor.

CHEN 5810 The Business of Engineering 3 s.h.
Industrial processing facilities, and the engineers and business people that run them. Decision-making perspectives and the technical and communication skills of each group are compared. Focus is on quality control, R&D, and efficiency.

CHEN 5811 Advanced Transport Phenomena 3 s.h.
Development of basic differential balance equations for mass, momentum and energy. Analytical and approximate solutions to the equation of change with application to the analysis of common engineering problems.
Prereq.: CHEN 3786.

CHEN 5820 Industrial Pollution Control 3 s.h.
Types, sources and effects of industrial and hazardous waste; principles of industrial and hazardous waste control; discussion and design of biological, physical, and chemical treatment processes.
Prereq.: CHEN 2684 or consent of instructor.

CHEN 5821 Fundamentals of Polymer Science 3 s.h.
The survey of polymerization mechanisms, polymer structure-property relationships, transport properties, flammability-related plasticizers and solvents as well as design applications.
Prereq.: CHEN 2684 or consent of instructor.

CHEN 5830 Nuclear Reactors 3 s.h.
Neutron interactions and scattering; moderation ratio, the steady state reactor core and four factor equation, the diffusion equation for various reactor geometries and the reflected reactor core.
Prereq.: CHEN 3726 or consent of instructor.

CHEN 5835 Introduction to Nuclear Fusion 3 s.h.
Fusion reactors; the kinetics of fusion reactions. Plasma confinement technology.
Prereq.: CHEN 3726.

CHEN 5845 Corrosion Engineering 3 s.h.
Introduction to causes and forms of corrosion, corrosion rate calculations, electrode potentials, electrochemistry, corrosion testing, and effects of corrosion on mechanical properties. Theory and use of corrosion inhibition methods.
Prereq.: CHEN 2684.

CHEN 5850 Industrial Processes 3 s.h.
A fundamental approach to the design of industrial chemical processes. Emphasis upon flow-charting, chemical reactions, separations involved, thermodynamics, and economic considerations. Food and pharmaceutical processing is a major focus.
Prereq.: CHEN 2684 or consent of instructor.

CHEN 5854 Corrosion Engineering 3 s.h.
Introduction to causes and forms of corrosion, corrosion rate calculations, electrode potentials, electrochemistry, corrosion testing, and effects of corrosion on mechanical properties. Theory and use of corrosion inhibition methods.
Prereq.: Junior or Senior Standing or Approval of the Instructor.

CHEN 5883 Mathematical Methods in Chemical Engineering 3 s.h.
The applications of advanced mathematics to the solution of chemical engineering problems. Topics covered include treatment and interpretation of engineering data, modeling of chemical engineering systems and formulation of ordinary and partial differential equations governing chemical engineering operations and their solutions by use of numerical and analytical techniques.
Prereq.: CHEN 3786.

CHEN 5886 Nuclear Reactor Design 3 s.h.
The steady state reactor core; four-factor equation, resonance escape probability, neutron flux distribution in various geometrics, two-group and multigroup theories. Transient reactor behavior and control; effect of delayed neutrons, fission product poisoning, nuclear fuels, nuclear heat transfer and burnout problems, reactor economy; fuel burnup and power cost. Thermal breeder and fast reactors. Neutron flux distribution measurements. Radiation detection and monitoring.
Prereq.: CHEN 3726 or consent of instructor.

Bachelor of Engineering in Chemical Engineering

Introduction
The Chemical Engineering Program at Youngstown State University—supplemented with courses in chemistry, physics, mathematics, and general engineering—provides a broad preparation for design, operation, and management in the chemical, biomedical, biological, nuclear, pharmaceutical, and energy-conversion industries, as well as graduate study leading to research positions in industry and government and to academic careers.

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Dr. Douglas Price - Associate Professor and Program Coordinator
Accreditation

The Chemical Engineering BE program has been accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org (http://www.abet.org/).

CHEMICAL ENGINEERING ANNUAL ENROLLMENT AND GRADUATION DATA

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Co-Operative Education and Internships

The Chemical Engineering Program encourages all of its students to participate in co-ops and internships prior to graduation. Students should register with the STEM Office of Professional Practice in order to participate.

Facilities

The chemical engineering laboratories are well-equipped for undergraduate instruction and student and faculty research. The equipment includes fluid flow apparatus, concentric tube and plate and frame heat exchangers, thermal conductivity apparatus, boiling heat transfer apparatus, tray dryer, double effect evaporator, computer-controlled distillation tower, gas absorption and liquid-liquid extraction columns, chemical reactors, electrostatic particle separator, centrifuges, filter presses, and other miscellaneous equipment.

For more information, contact Douglas M. Price, Program Coordinator.

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<th>COURSE</th>
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<td>CMST 1545</td>
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Natural Science (met with CHEM and PHYS required for major)  
First Year Experience (Met with ENGR 1500 in major)  

**General Engineering Courses**  
ENGR 1500 Engineering Orientation 1  
ENGR 1550 Engineering Concepts 2  
ENGR 1560 Engineering Computing 2  

**Chemical Engineering Courses**  
CHEN 2650 Computer Methods in Chemical Engineering 2  
CHEN 2683 Chemical Engineering Principles 1 3  
CHEN 2684 Chemical Engineering Principles 2 3  
CHEN 3771 Chemical Engineering Thermodynamics 1 3  
CHEN 5800A Special Topics Thermo Dynamics Lab 1  
CHEN 3785L Transport Phenomena Laboratory 1  
CHEN 3786 Transport Phenomena 1 4  
CHEN 3787 Transport Phenomena 2/Unit Operations 1 3  
CHEN 3787L Unit Operations Laboratory 1 1  
CHEN 4815 Unit Operations 2 3  
CHEN 4815R Unit Operations 2 Applications 1  
CHEN 4880 Chemical Reactor Design 1 3  
CHEN 4880R Reactor Design Applications 1  
CHEN 4882 Process Dynamics 3  
CHEN 4887 Process and Plant Design 1 3  
CHEN 4888 Process and Plant Design 2 3  

Chemical Engineering Electives (select two courses from the following) 6  
STEM 4890 STEM Internship  

**Mathematics/Statistics Courses**  
MATH 1571 Calculus 1 4  
MATH 1572 Calculus 2 4  
MATH 2673 Calculus 3 4  
MATH 3705 Differential Equations 3  
STAT 3743 Probability and Statistics 4  

**Chemistry Courses**  
CHEM 1515 General Chemistry 1 4  
CHEM 1515L General Chemistry 1 Laboratory 0  
CHEM 1516 General Chemistry 2 4  
CHEM 1516L General Chemistry 2 Laboratory 0  
CHEM 3719 Organic Chemistry 1 4  
CHEM 3719L Organic Chemistry 1 Laboratory 0  
CHEM 3719R Organic Chemistry Recitation 1 1  
CHEM 3720 Organic Chemistry 2 4  
CHEM 3720L Organic Chemistry 2 Laboratory 0  
CHEM 3720R Organic Chemistry Recitation 2 1  
CHEM 4860 Regulatory Aspects of Industrial Chemistry 1  
CHEM 3739 Physical Chemistry 1 3  

**Physics Courses**  
PHYS 2610 General Physics 1 4  
PHYS 2611 General Physics 2 4  

**Total Semester Hours** 125-126  

**Year 1**  

**Fall**  
S.H.  
ENGL 1550 or ENGL 1549 Writing 1 or Writing 1 with Support 3-4  
ENGR 1500 Engineering Orientation 1  
ENGR 1550 Engineering Concepts 2  
CHEM 1515 General Chemistry 1 4  
& 1515L General Chemistry 1 Laboratory 4  
MATH 1571 Calculus 1 4  
GER AH-1 Arts and Humanities Elective 3  

**Semester Hours** 17-18  

**Spring**  
ENGL 1551 Writing 2 3  
CMST 1545 Communication Foundations 3  
ENGR 1560 Engineering Computing 2  
CHEM 1516 General Chemistry 2 4  
& 1516L General Chemistry 2 Laboratory 4  
MATH 1572 Calculus 2 4  

**Semester Hours** 16  

**Year 2**  

**Fall**  
CHEM 3719 Organic Chemistry 1 4  
& 3719L Organic Chemistry 1 Laboratory 0  
CHEM 3719L Organic Chemistry 1 Laboratory 0  
CHEM 3719R Organic Chemistry Recitation 1 1  
MATH 2673 Calculus 3 4  
PHYS 2610 General Physics 1 4  
CHEN 2683 Chemical Engineering Principles 1 3  

**Semester Hours** 16  

**Spring**  
CHEM 3720 Organic Chemistry 2 4  
& 3720L Organic Chemistry 2 Laboratory 0  
CHEM 3720L Organic Chemistry 2 Laboratory 0  
CHEM 3720R Organic Chemistry Recitation 2 1  

**Semester Hours** 17  

**Year 3**  

**Fall**  
CHEM 3739 Physical Chemistry 1 3  
STAT 3743 Probability and Statistics 4  
CHEM 3771 Chemical Engineering Thermodynamics 1 3  
CHEM 5800A Special Topics Thermo Dynamics Lab 1  
CHEM 3786 Transport Phenomena 1 4  

**Semester Hours** 15  

**Spring**  
GER SS-1 Social Science Elective 3  
GER SPA-1 Social and Personal Awareness Elective 3  

---
Chemical engineering should consult with the program coordinator for individual counseling to develop a program of study that fully uses their educational background. Other courses may be used at the discretion of the program coordinator.

### Year 1
#### Fall
- **GER AH-2 Arts and Humanities Elective: Ethics** 1 S.H.
- **CHEN 3787L** Unit Operations Laboratory 1 S.H.
- **CHEN 4815** Unit Operations 2 3 S.H.
- **CHEN 4888** Process and Plant Design 1 3 S.H.
- **CHEN Elective-1 Chemical Engineering Elective** 2 S.H.

#### Semester Hours
15 S.H.

### Spring
- **GER SS-2 Social Science Elective** 3 S.H.
- **GER SPA-2 Social & Personal Awareness Elective** 3 S.H.
- **CHEN 4815L** Unit Operations Laboratory 2 1 S.H.
- **CHEN 4882** Process Dynamics 3 S.H.
- **CHEN 4888** Process and Plant Design 2 3 S.H.
- **CHEN Elective-2 Chemical Engineering Elective** 2 S.H.

#### Semester Hours
14 S.H.

### Total Semester Hours
126-127 S.H.

Note: Transfer students from any two- or four-year academic program at other institutions or at this University who wish to pursue studies in chemical engineering should consult with the program coordinator for individual counseling to develop a program of study that fully uses their educational background and requires a minimum of time to satisfy the requirements for the degree of Bachelor of Engineering in chemical engineering.

#### COURSE TITLE S.H.

1. **Ethics Elective** 3 S.H.

   Select one of the following:
   - **PHIL 1561** Technology and Human Values
   - **PHIL 2625** Introduction to Professional Ethics
   - **PHIL 2626** Engineering Ethics
   - **PHIL 2628** Business Ethics

2. **Chemical Engineering Elective** 6 S.H.

   Select 2 courses from the following:
   - **STEM 4890** STEM Internship
   - **CHEN 2688** Energy Assessment
   - **CHEN 4840** Biochemical Engineering Fundamentals
   - **CHEN 3726** Elementary Nuclear Reactor Engineering
   - **CHEN 4801** Chemical Engineering Projects
   - **CHEN 5900** Special Topics
   - **CHEN 5905** Principles of Biomedical Engineering
   - **CHEN 5911** Advanced Transport Phenomena
   - **CHEN 5920** Industrial Pollution Control
   - **CHEN 5921** Fundamentals of Polymer Science
   - **CHEN 5950** Industrial Processes
   - **CHEN 5854** Corrosion Engineering
   - **CHEN 5883** Mathematical Methods in Chemical Engineering
   - **CHEN 6981** Advanced Chemical Reaction Engineering

   Other courses may be used at the discretion of the program coordinator.

#### ENGR 1500 Engineering Orientation 1 s.h.
Introduction to engineering careers and the different engineering disciplines. Academic success strategies and university resources to support student success.

#### ENGR 1550 Engineering Concepts 2 s.h.
Introduction to the basic skills needed in engineering including engineering computing and an introduction to the engineering design process utilizing science, technology, engineering, and mathematics (STEM) fundamentals. One hour lecture and three hours laboratory per week.
Prereq.: Eligibility to take MATH 1513 or higher level math course.

#### ENGR 1560 Engineering Computing 2 s.h.
Computing skills required in engineering. Structured programming. Engineering problems and open ended design projects are solved in teams with results professionally presented. 1.5 hours lecture, 1.5 hours lab.
Prereq.: ENGR 1550, MATH 1571 or concurrent.

### Year 2
#### Fall
- **CHEM 1515 General Chemistry 1** 4 S.H.
  - An introduction to the fundamental principles of chemistry, including measurement and calculation; chemical stoichiometry; the properties of gases; atomic and molecular structure; bonding; thermochemistry; and periodic properties. Intended for majors in the natural sciences and engineering. Three hours lecture, three hours lab-discussion.
  - Prereq.: "C" or better in CHEM 1501 or equivalent; "C" or better in MATH 1513 or "C" or better in MATH 1510.
  - Coreq.: CHEM 1515L; CHEM 1515R if major or repeating CHEM 1515.
  - Gen Ed: Natural Science.
- **CHEM 1515L General Chemistry 1 Laboratory** 0 S.H.
  - General Chemistry 1 Laboratory.
- **CHEM 1516 General Chemistry 2** 4 S.H.
  - A continuation of the study of the principles of chemistry, including solution properties; acids and bases; chemical equilibrium; thermodynamics; reaction kinetics; and electrochemistry. Intended for majors in the natural sciences and engineering. Three hours lecture, three hours lab-discussion.
  - Prereq.: "C" or better in CHEM 1515; Concurrent: CHEM 1516L; CHEM 1516R if major or repeating CHEM 1516.
  - Gen Ed: Natural Science.
- **CHEM 1516L General Chemistry 2 Laboratory** 0 S.H.
  - General Chemistry 2 Laboratory.
- **CHEM 3719 Organic Chemistry 1** 4 S.H.
  - Organic compounds, reactions and theories. Typical preparations and procedures of analysis. Three hours lecture, three hours lab-discussion.
  - Prereq.: "C" or better in CHEM 1516.
- **CHEM 3719L Organic Chemistry 1 Laboratory** 0 S.H.
  - Organic Chemistry 1 Laboratory.
- **CHEM 3720 Organic Chemistry 2** 4 S.H.
  - Organic compounds, reactions and theories. Typical preparations and procedures of analysis. Three hours lecture, three hours lab-discussion.
  - Prereq.: "C" or better in CHEM 3719.
- **CHEM 3720L Organic Chemistry 2 Laboratory** 0 S.H.
  - Organic Chemistry 2 Laboratory.
- **CHEM 3739 Physical Chemistry 1** 3 S.H.
  - Principles and applications of thermodynamics and kinetics to chemical systems.
  - Prereq.: "C" or better in CHEM 3720, PHYS 2610, MATH 1572.
- **CHEM 4860 Regulatory Aspects of Industrial Chemistry** 1 S.H.
  - Roles and responsibilities of industrial chemists. Industrial hygiene and safety. Industrial chemical processes, their waste products, their environmental effects, and the treatment of pollutants. Governmental regulations relating to waste disposal, product safety, occupational safety, resource conservation, environmental protection, and problems of awareness and compliance.
  - Prereq.: CHEM 3720.
MATH 1571 Calculus 1 4 s.h.
A sequence of integrated courses in analytic geometry and calculus. A detailed study of limits, derivatives, and integrals of functions of one and several variables with applications.
Prereq.: MATH 1513, minimum grade of "C", or MATH 1510 and MATH 1511, minimum grade of "C" in both courses, or at least Level 70 on the Mathematics Placement Test.
Gen Ed: Mathematics.

MATH 1572 Calculus 2 4 s.h.
A sequence of integrated courses in analytic geometry and calculus. A detailed study of limits, derivatives, and integrals of functions of one and several variables with applications.
Prereq.: MATH 1572 with a "C" or better.

MATH 3705 Differential Equations 3 s.h.
Prereq.: C or better in one of MATH 2673, MATH 2673H, or MATH 2686H.

PHYS 2610 General Physics 1 4 s.h.
A course in mechanics; the kinematics and dynamics of masses in translation and rotation; Newton's Laws; gravity; the conservation laws of energy and momentum; simple harmonic motion and introduction to wave motion and sound.
Prereq.: High school physics or PHYS 1501.
Prereq. or concurrent: MATH 1571.
Gen Ed: Natural Science.

PHYS 2611 General Physics 2 4 s.h.
Study of electric and magnetic fields and their effects; introduction to electric circuits; light as an electromagnetic wave; introduction to geometrical and physical optics.
Prereq.: PHYS 2610.
Prereq. or concurrent: MATH 1572.
Gen Ed: Natural Science.

CHEN 2650 Computer Methods in Chemical Engineering 2 s.h.
Application of computational software packages and spreadsheets to solve chemical engineering problems. Utilization of process simulation packages. Real-time computing applications in laboratory automation.
Prereq.: ENGR 1550, ENGR 1550H or consent of instructor.

CHEN 2683 Chemical Engineering Principles 1 3 s.h.
Prereq.: MATH 1571, MATH 1571H or MATH 1585H; CHEM 1515.

CHEN 2684 Chemical Engineering Principles 2 3 s.h.
Prereq.: CHEN 2683.

CHEN 2671 Chemical Engineering Thermodynamics 1 3 s.h.
Development of the concepts and formalisms of thermodynamics and their applications to chemical engineering systems. Real and ideal behavior of single and multicomponent systems. Introduction to the thermodynamics of phase equilibria. Analysis and design of thermal systems. Additional topics include applications in transport phenomena and plant design.
Prereq.: MATH 2673 or MATH 2686H and CHEN 2684.

CHEN 3785L Transport Phenomena Laboratory 1 s.h.
Experimental studies of transport properties and momentum, energy and mass transfer using industrial type equipment. Correlation of data and comparison with theory. Oral presentations and preparation of technical reports. Three hours laboratory.
Prereq.: CHEN 3786 or concurrent.

CHEN 3787 Transport Phenomena 2/Unit Operations 1 3 s.h.
Mass transfer processes. Diffusional operations and separation processes with emphasis on evaporation, humidification and drying. Derivation of design equations from mass and energy balances, and application to equipment design. Solution of simultaneous differential equations of mass, momentum, and energy.
Prereq.: CHEN 3786.

CHEN 3787L Unit Operations Laboratory 1 1 s.h.
Experiments in absorption, cascade operations, reaction kinetics, mixing and other chemical engineering operations employing industrial and pilot plant size equipment and instrumentation. Treatment of experimental data, correlations and comparison with theory. Oral presentations and preparation of technical reports. Three hour laboratory.
Prereq.: CHEN 3787.

CHEN 4815 Unit Operations 2 3 s.h.
Gas absorption and desorption, interphase mass transfer processes, liquid extraction and leaching. Physical separation processes including filtration, settling, and size reduction. Derivation of the design equations for the above processes, and applications of the design equations to equipment design.
Prereq.: CHEN 3787.

CHEN 4815L Unit Operations Laboratory 2 1 s.h.
Experiments in absorption, cascade operations, reaction kinetics, mixing and other chemical engineering operations employing industrial and pilot plant size equipment and instrumentation. Treatment of experimental data, correlations and comparison with theory. Oral presentations and preparation of technical reports. Three hour laboratory.
Prereq.: CHEN 4815.

CHEN 4880 Chemical Reactor Design 1 3 s.h.
Chemical reaction equilibria. Theoretical developments and methods of interpreting experimental data pertaining to chemical kinetics. General design principles and construction features of reactors with application of these principles to the design of specific reactors.
Prereq.: CHEN 3771.

CHEN 4882 Process Dynamics 3 s.h.
Introduction to automatic control and control loop concepts. Laplace transform techniques. Linear open-loop and closed-loop systems. Root-locus and frequency response methods. Design of control systems.
Prereq.: CHEN 3786.

CHEN 4887 Process and Plant Design 1 3 s.h.
An examination of engineering economic analysis to include: cost estimation, profitability, optimum design, principles of fixed and operating costs, materials and site selection, and general and specialized design techniques.
Prereq.: CHEN 3787 Minimum grade of C, CHEN 4880 Minimum grade of C and unrecalculated GPA of 2.0 or better in major courses.

CHEN 4888 Process and Plant Design 2 3 s.h.
The application of chemical engineering and cost principles to the component design and selection of process equipment. The application of chemical engineering and cost principles to the design of chemical plants and processes including societal aesthetic, environmental, and safety considerations.
Prereq.: CHEN 4887 minimum grade of C.

Student Outcomes

1. an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics
2. an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors
The mission of the Civil Engineering program is to:

1. offer high-quality bachelor's degree in civil engineering that encompasses basic engineering sciences, as well as both traditional and emerging areas of the discipline;
2. prepare graduates to adapt to global and domestic engineering challenges and changing industry practices;
3. foster student-faculty relationships that enrich teaching and learning, develop scholarship, and encourage public service;
4. maintain an academic structure characterized by integrity, and by respect for students, society, the environment, and the civil engineering profession;
5. prepare graduates for, and facilitate, lifelong intellectual and professional development; and
6. contribute to economic prosperity of the region, state, and nation by enhancing the size and competitiveness of the civil engineering workforce.

**Program Educational Objectives**

The Civil Engineering program will provide graduates with the foundation of knowledge and skills necessary for productive and rewarding careers. The program prepares graduate to achieve the following educational objectives within a few years after graduation:

1. Perform essential functions on multidisciplinary teams in their professional careers in civil engineering.
2. Demonstrate necessary communication, management, leadership, and interdisciplinary technical skills to excel in engineering and non-engineering sectors.
3. Continue their intellectual, social, and professional growth through lifelong learning.
4. Obtain professional engineering licensure.

**Student Outcomes**

The YSU undergraduate program in Civil Engineering adopted the following student outcomes that prepare its graduates to attain the program educational objectives listed above. At the time of graduation, the program graduates should have:

1. an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics;
2. an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors;
3. an ability to communicate effectively with a range of audiences;
4. an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts;
5. an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors;
6. an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives;
7. an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions;
8. an ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

**Program Description and Accreditation**

In the first two years of the program, students take coursework in the fundamentals of engineering, mathematics and basic science in order to strengthen their technical background and develop intellectual maturity. They continue in a broad-based civil engineering program that helps them develop competence in a variety of areas within the discipline. Topics include structural, geotechnical, transportation, environmental, and water resources engineering, as well as surveying and construction management. In their last two years, students choose elective courses in various sub-disciplines of civil engineering based on their academic and career interests.

Instruction on the design process is fully integrated throughout the curriculum to foster the depth of understanding and self-confidence that students will need to think creatively and become productive engineers. The curriculum is based on the fundamental concept that students can best develop their creative skills through a series of progressively more demanding design
experiences leading up to a major, comprehensive senior-level complex engineering design project.

Students in the CE program earn a Bachelor of Engineering in Civil Engineering degree. Graduates are prepared for advanced studies at the master’s and doctoral levels in engineering, or for employment in the engineering profession.

The CE program offers the atmosphere of a small school in maintaining close contact between faculty and students. Faculty members serve as academic advisors and are engaged in all phases of instruction from freshman to graduation. All of the facilities of the CE program are located within Moser Hall. The program maintains laboratories for strength of materials, concrete testing, soil mechanics, surveying, environmental engineering, and fluid mechanics – all in Moser Hall. A wide variety of equipment is available these laboratories to support both teaching and research activities.

The YSU undergraduate program in Civil Engineering has been accredited by the Engineering Accreditation Commission (EAC) of ABET, http://www.abet.org.

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ssharma06@ysu.edu

Civil Engineering Annual Enrollment and Graduation Data

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Co-ops/Internships in Civil Engineering

The Civil Engineering program encourages its students to participate in co-ops and internships. A co-op is defined as a structured developmental program with increasing responsibilities in a full time position. An internship is a project-specific learning program that lasts several weeks to a semester. Students can work full-time or part-time as an intern while attending classes. Appropriate academic credits are awarded for both co-ops and internships, although those credits are not counted towards the Civil Engineering degree. Students should register with the STEM Professional Services office in order to participate in co-ops and internships.

For more information on co-ops and internships, contact Professor Anwarul Islam, Program Director.

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**ENGINEERING FUNDAMENTALS**

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**GENERAL EDUCATION**

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**Total Semester Hours**

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**GER SS-1: Social Science Elective**

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**GER SS-2: Social Science Elective**

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**GER SS-2: Social Science Elective**

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**GER SS-2: Social Science Elective**

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Student Outcomes

The YSU undergraduate program in Civil Engineering adopted the following student outcomes that prepare its graduates to attain the program educational objectives listed above. At the time of graduation, the program graduates should have:

1. an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics
2. an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors
3. an ability to communicate effectively with a range of audiences
4. an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts
5. an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives
6. an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions
7. an ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

CEEN 2601 Statics 3 s.h.
Principles of engineering mechanics as applied to statics with vector applications to forces and moments; centroid and center of gravity; equilibrium; friction; moments of inertia: relationship between loads, stress and strain in tension, compression, torsion and bending.
Prereq.: MATH 1572 or MATH 1572H; PHYS 2610 or concurrent.

CEEN 2602 Strength of Materials 3 s.h.
Relationships between loads, shear and bending moments in beams; combined stresses in beams; indeterminate beam analysis; virtual load; connections; columns.
Prereq.: CEEN 2601.

CEEN 2602L Strength of Materials Lab 1 s.h.
Experimental verification of strength of materials; testing: tension, torsion, non-destructive tests of steel; concrete compression and Poisson ration, wood tests.
Coreq.: CEEN 2602.

CEEN 2610 Surveying 3 s.h.
The theory of surveying and the use of instruments. Problems in leveling, traversing, and topography. Introduction to circular and vertical curves.
Prereq.: MATH 1513 or equivalent.

CEEN 2610L Surveying Laboratory 1 s.h.
Field surveying principles and techniques. Uses of transit and level are stressed. Three laboratory hours per week.
Coreq.: CEEN 2610.

CEEN 2610L Surveying Laboratory 1 s.h.
Field surveying principles and techniques. Uses of transit and level are stressed. Three laboratory hours per week.
Coreq.: CEEN 2610.

CEEN Elective-3: CE Elective. May substitute with approval of CE Program Coordinator.

GER AH-2: Arts & Humanities Elective. Select either
PHIL 2625 Introduction to Professional Ethics
or PHIL 2626 or Engineering Ethics
or PHIL 2628 or Business Ethics

GER SPA-2: Social & Personal Awareness Elective 3 s.h.

Total Semester Hours 128

CEEN 2660 Computer Aided Design and Drafting 2 s.h.
This course is designed for students who wish to be involved with the civil engineering design fields and for those interested in computer aided design and drafting. Students will be introduced to both traditional and computer aided design and drafting skills. The aim of this course is to introduce students to basic information, skills, and concepts related to drafting and design. Special attention is given to: sketching, measurement, room planning, multi-view drawing, auxiliary views, working drawings, sectional views, orthographic drawings along with AutoCAD tools and commands. The course includes 1 s.h. lecture and 1 s.h. lab.

CEEN 2610 Statics 3 s.h.
Principles of engineering mechanics as applied to statics with vector applications to forces and moments; centroid and center of gravity; equilibrium; friction; moments of inertia: relationship between loads, stress and strain in tension, compression, torsion and bending.
Prereq.: MATH 1572 or MATH 1572H; PHYS 2610 or concurrent.

CEEN 2602 Strength of Materials 3 s.h.
Relationships between loads, shear and bending moments in beams; combined stresses in beams; indeterminate beam analysis; virtual load; connections; columns.
Prereq.: CEEN 2601.

CEEN 2602L Strength of Materials Lab 1 s.h.
Experimental verification of strength of materials; testing: tension, torsion, non-destructive tests of steel; concrete compression and Poisson ration, wood tests.
Coreq.: CEEN 2602.

CEEN 2610 Surveying 3 s.h.
The theory of surveying and the use of instruments. Problems in leveling, traversing, and topography. Introduction to circular and vertical curves.
Prereq.: MATH 1513 or equivalent.

CEEN 2610L Surveying Laboratory 1 s.h.
Field surveying principles and techniques. Uses of transit and level are stressed. Three laboratory hours per week.
Coreq.: CEEN 2610.

CEEN 2660 Computer Aided Design and Drafting 2 s.h.
This course is designed for students who wish to be involved with the civil engineering design fields and for those interested in computer aided design and drafting. Students will be introduced to both traditional and computer aided design and drafting skills. The aim of this course is to introduce students to basic information, skills, and concepts related to drafting and design. Special attention is given to: sketching, measurement, room planning, multi-view drawing, auxiliary views, working drawings, sectional views, orthographic drawings along with AutoCAD tools and commands. The course includes 1 s.h. lecture and 1 s.h. lab.

CEEN 2610 Statics 3 s.h.
Principles of engineering mechanics as applied to statics with vector applications to forces and moments; centroid and center of gravity; equilibrium; friction; moments of inertia: relationship between loads, stress and strain in tension, compression, torsion and bending.
Prereq.: MATH 1572 or MATH 1572H; PHYS 2610 or concurrent.

CEEN 2602 Strength of Materials 3 s.h.
Relationships between loads, shear and bending moments in beams; combined stresses in beams; indeterminate beam analysis; virtual load; connections; columns.
Prereq.: CEEN 2601.

CEEN 2602L Strength of Materials Lab 1 s.h.
Experimental verification of strength of materials; testing: tension, torsion, non-destructive tests of steel; concrete compression and Poisson ration, wood tests.
Coreq.: CEEN 2602.

CEEN 2610 Surveying 3 s.h.
The theory of surveying and the use of instruments. Problems in leveling, traversing, and topography. Introduction to circular and vertical curves.
Prereq.: MATH 1513 or equivalent.

CEEN 2610L Surveying Laboratory 1 s.h.
Field surveying principles and techniques. Uses of transit and level are stressed. Three laboratory hours per week.
Coreq.: CEEN 2610.
CEEN 3751 Water Quality Analysis 3 s.h.
Introduction to physical, chemical, and biological measurements of water quality. Sample collection and laboratory analysis of natural waters, drinking water, and wastewater. Interpretation of environmental data. Two hours lecture and three hours laboratory per week. Identical to ENST 3751.
Prereq.: CEEN 3736 or ENST 2600; CHEM 1515.

CEEN 3751L Water Quality Analysis Lab 0 s.h.
Laboratory experience in the analysis of natural waters, drinking water and wastewater. Emphasizes procedures for the collection and interpretation of data on current environmental problems. Three hours laboratory per week. Must be taken concurrently with CEEN 3751.

CEEN 4800 Special Topics 3 s.h.
Special topics and new developments in Civil Engineering. Subject matter, credit hours, and special prerequisites to be announced in advance of each offering. May be repeated to a maximum of 6 s.h.
Prereq.: Senior standing or consent of instructor.

CEEN 4812 Construction Management 3 s.h.
Fundamentals of construction management: contracts, bonding, estimating, organization, finance; cost and productivity of equipment, material, and labor; and project planning and scheduling.
Prereq.: CEEN 3717 or CEEN 4881.

CEEN 4835 Highway Design 3 s.h.
Methods of highway route location; design methods and standards for highways, intersections, freeways, and interchanges. Includes extensive use of computer-aided design.
Prereq.: CEEN 3720.

CEEN 4863 Integrated Design Project 3 s.h.
Students will be required to complete a meaningful design experience that focuses attention on professional practice and is predicated on the accumulated background of curriculum components. Two hours of lecture and three hours of laboratory a week.
Prereq.: CEEN 5855 and GPA of 2.0 or better.
Gen Ed: Capstone.

CEEN 4879 Civil Engineering Analysis 3 s.h.
Application of mathematical and numerical methods to the systematic analysis and development of problems in the field of Civil Engineering.
Prereq.: CEEN 3749.

CEEN 4881 Geotechnical Engineering 3 s.h.
Properties of soil, classification, capillarity, seepage, permeability, stresses, consolidation, shear strength; analysis and design of foundation structures, retaining walls, piles, drilled piers, sheet pile walls, special footings, stability.
Prereq.: MATH 2673; CEEN 3749.

CEEN 4881L Geotechnical Lab 1 s.h.
Typical soil testing procedures and physical testing of soil samples.
Prereq.: Concurrent with: CEEN 4881.

CEEN 5820 Pavement Material and Design 3 s.h.
Design methods for flexible, rigid and other wheel-supporting pavements to include investigation, testing and preparation of subgrade, base course and pavement materials, design of various pavement mixtures, stresses in pavements, pavement design, and strengthening existing pavements.
Prereq.: CEEN 3720 and CEEN 4881.

CEEN 5829 Civil Engineering Materials - Concrete 3 s.h.
A course designed to broaden the student’s understanding of Portland Cement Concrete as a construction material. Topics include the study of cement, hydration of cement, aggregates, admixtures for concrete, mix design handling and placing, curing and properties of Portland Cement Concrete. Testing of Concrete, quality control and special concretes are also included. A library research paper on a concrete-related topic of the student’s choice is required.
Prereq.: CEEN 3749 or permission of instructor.

CEEN 5832 Natural Systems Engineering 3 s.h.
Introduction to the features, functions and values of natural aquatic systems, and engineering approaches to analysis and restoration design. Focus on wetlands and streams. Topics include regulations, wetland delineation, constructed wetland design, basic stream geomorphology; and stream restoration design.
Prereq.: CEEN 3736 or permission of instructor.

CEEN 5836 Environmental Water Chemistry 3 s.h.
Fundamental principles and calculations of major chemical reactions and equilibriums that occur in aquatic environments, and water/wastewater treatment processes.
Prereq.: CEEN 3736.

CEEN 5837 Environmental Engineering Design 3 s.h.
Theory and design of unit operations and processes for treatment of drinking water and municipal wastewater.
Prereq.: CEEN 3736.

CEEN 5849 Structural Analysis 2 3 s.h.
Analysis of statically indeterminate beams, trusses, bents and multistory frames, utilizing concepts of strain energy, virtual work, slope-deflection, and moment distribution. Introduction to matrix methods of analysis using force and displacement methods.
Prereq.: CEEN 3749.

CEEN 5855 Reinforced Concrete Design 3 s.h.
An introduction to the behavior, analysis, and design of reinforced concrete members. Included are singly and doubly reinforced beams, tee-beams, slabs, short and long columns.
Prereq.: CEEN 3749.

CEEN 5856 Steel Design 3 s.h.
An introduction to the behavior and design of steel structures. Included is the design of rolled and built-up tension members, beams, columns, beam-columns, welded and bolted connections.
Prereq.: CEEN 3749.

CEEN 5869 Design of Air Pollution Control Systems 3 s.h.
Engineering analysis, procedures, and techniques for the selection, applications and operation of air pollution control methods in various operational situations.
Prereq.: CEEN 3736.

CEEN 5877 Systems Engineering and Project Management 3 s.h.
Systems approach to engineering design; non-linear models; linear programming; dynamic programming; network analysis; project management.
Prereq.: MATH 3705.

CEEN 5880 Advanced Hydraulics 3 s.h.
Application of hydraulic principles for one dimensional river modeling; understanding the fundamental processes of open channel hydraulics; application of HEC-RAS/HEC-GeoRAS models for river system modeling.
Prereq.: A "C" or better in CEEN 3717.

CEEN 5882 Foundation Engineering 3 s.h.
Analysis and design of various foundations, including abutments, piers, piles, and footings; slope stability of embankments.
Prereq.: CEEN 4881 and CEEN 5855.

CEEN 5883 Bridge Engineering 3 s.h.
Analysis and design of concrete and steel bridges; specifications and code requirements; design detailing; effects of natural and man-made hazards on bridges; implications of bridge failures.
Prereq.: CEEN 5855 and CEEN 5856.

CEEN 5884 Solid and Hazardous Waste Management 3 s.h.
Sources, characteristics, handling and disposal options for solid waste and hazardous waste; topics include regulations, health effects, waste minimization, collection systems, landfill design, treatment and processing methods, and site assessment.
Prereq.: CEEN 3736.
Electrical and Computer Engineering

(330) 941-3012

This program offers coursework leading to the Bachelor of Engineering with a major in electrical engineering. Traditional, computer/digital, and biomedical options are available. The first courses in the electrical and computer engineering are ECEN 1521 Digital Circuits and ECEN 1521L Digital Circuits Laboratory, and are available to all University students without prerequisites. Visit the office or website for details.

Mission

The Electrical and Computer Engineering program is committed to academic excellence, and it provides educational opportunities in electrical and computer engineering. We provide students at baccalaureate and master levels with diverse and comprehensive educational experiences which meet the highly demanding standards required by industry and preparation for further education.

We utilize the resources of the university and interact with industry to evaluate, optimize, and upgrade our teaching, research, scholarship, service and facilities to continue offering a high-standard educational environment. We promote students’ intellectual growth to become fully developed, informed, and productive in order to serve themselves and their local and global communities effectively.

Program Educational Objectives

The Electrical and Computer Engineering program at Youngstown State University offers students a high standard of engineering education. In fulfillment of its mission, as well as the missions of the College of Science, Technology, Engineering, and Mathematics, and the University, the following Program Educational Objectives are established for the Electrical Engineering Program.

Within a few years of graduation, our graduates should be able to:

1. Competently design, analyze, test, and implement systems and devices in the field of electrical engineering within the constraints set by the client and by society, and disseminate the results.
2. Practice engineering ethically and responsibly, both individually and within diverse teams, while holding paramount the impact of engineering decisions on society and ecology.
3. Commit to a career long dedication to growth through continued learning in their engineering profession and/or pursuit of post graduate education, and to demonstrate leadership and influence within their employer’s organization.
4. An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.
5. An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
6. An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
7. An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

Student Outcomes

The following (1 through 7) Student Outcomes support the program educational objectives. Attainment of these outcomes by students by the time of their graduation prepares graduating students to enter the professional practice of engineering.

1. An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
2. An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
3. An ability to communicate effectively with a range of audiences.
4. An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.
5. An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
6. An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
7. An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

Electrical Engineering Annual Enrollment and Graduation Data

The Electrical Engineering BE Program has been accredited by the engineering accreditation commission of ABET, http://www.abet.org (http://www.abet.org/).

<table>
<thead>
<tr>
<th>Term</th>
<th>Enrollment</th>
</tr>
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<tbody>
<tr>
<td>Fall 2012</td>
<td>103</td>
</tr>
<tr>
<td>Fall 2013</td>
<td>103</td>
</tr>
<tr>
<td>Fall 2014</td>
<td>117</td>
</tr>
<tr>
<td>Fall 2015</td>
<td>108</td>
</tr>
<tr>
<td>Fall 2016</td>
<td>123</td>
</tr>
<tr>
<td>Fall 2017</td>
<td>123</td>
</tr>
<tr>
<td>Fall 2018</td>
<td>141</td>
</tr>
</tbody>
</table>

Academic Year Degrees Awarded

| 2012-2013 | 19        |
| 2013-2014 | 16        |
| 2014-2015 | 29        |
| 2015-2016 | 23        |
| 2016-2017 | 35        |
| 2017-2018 | 30        |

Laboratory Facilities

The Electrical and Computer Engineering program maintains well-equipped laboratory facilities for circuits, electronics, communications, electromagnetics, energy conversion, power systems, control systems, and digital systems. PC computing and wireless networking are available, as well as various licensed software packages.

Professional Practice

The Electrical and Computer Engineering program participates in the College of STEM Professional Practice Program.

Students who complete course and internship requirements related to the field may receive up to 2 s.h. of credit toward ECEN elective courses. Contact the department for details.

Tracks

Traditional, computer/digital, and biomedical options with design projects, computer simulation, and hands-on laboratory sessions are the pillars of the Bachelor of Engineering with a major in electrical engineering. These features provide students with the opportunity to prepare for a vast array of entry-level positions or advanced studies.
With faculty assistance, students tailor their programs to meet their educational objectives. This individualized approach includes choices of options and elective courses, participation in a co-op, and semester-by-semester scheduling of courses.

### Traditional TRACK
The traditional option:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electrical Engineering Core</td>
<td></td>
<td>53</td>
</tr>
<tr>
<td>Other Engineering</td>
<td></td>
<td>11</td>
</tr>
<tr>
<td>Math</td>
<td></td>
<td>18</td>
</tr>
<tr>
<td>Science</td>
<td></td>
<td>15</td>
</tr>
<tr>
<td>Writing and Speech</td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>General Education Courses</td>
<td></td>
<td>18</td>
</tr>
<tr>
<td><strong>Total Semester Hours</strong></td>
<td></td>
<td><strong>124</strong></td>
</tr>
</tbody>
</table>

### Computer/digital TRACK
The computer/digital option:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electrical Engineering Core</td>
<td></td>
<td>41</td>
</tr>
<tr>
<td>Other Engineering</td>
<td></td>
<td>11</td>
</tr>
<tr>
<td>Computer Engineering/Science</td>
<td></td>
<td>19</td>
</tr>
<tr>
<td>Math</td>
<td></td>
<td>18</td>
</tr>
<tr>
<td>Science</td>
<td></td>
<td>15</td>
</tr>
<tr>
<td>Writing and Speech</td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>General Education Courses</td>
<td></td>
<td>18</td>
</tr>
<tr>
<td><strong>Total Semester Hours</strong></td>
<td></td>
<td><strong>131</strong></td>
</tr>
</tbody>
</table>

### Biomedical TRACK
The biomedical option:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electrical Engineering Core</td>
<td></td>
<td>41</td>
</tr>
<tr>
<td>Other Engineering</td>
<td></td>
<td>11</td>
</tr>
<tr>
<td>Math</td>
<td></td>
<td>18</td>
</tr>
<tr>
<td>Science including Biology and Organic Chemistry</td>
<td></td>
<td>32</td>
</tr>
<tr>
<td>Writing and Speech</td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>General Education Courses</td>
<td></td>
<td>18</td>
</tr>
<tr>
<td><strong>Total Semester Hours</strong></td>
<td></td>
<td><strong>129</strong></td>
</tr>
</tbody>
</table>

Students in any of these options can participate in the co-op program. Scheduling is reasonably flexible, but there are some restrictions.

### Course Scheduling
Scheduling of courses will depend upon your particular situation. Are you working part time? Will you pursue an internship? Do you wish a full- or part-time academic pursuit of the degree? Answers to these questions will affect your scheduling of courses. The Electrical and Computer Engineering program attempts to schedule junior and senior courses to accommodate these situations.

Advising is mandatory, and students are required to meet with their department advisors to choose their semester-by-semester courses. Also, up-to-date recommended schedule and curriculum lists are available on-line and at the department office.

For more information, visit Electrical Engineering Major (https://ysu.edu/academics/science-technology-engineering-mathematics/electrical-engineering-major/).
ECEN 2614 Basics of Electrical Engineering 3 s.h.
Introduction to electrical circuit elements and laws; DC and AC analysis.
Introduction to digital devices and circuits with applications. Applications of
electromagnetics. Intended for non-electrical engineering majors.
Prereq.: MATH 1571.
ECEN 2632 Basic Circuit Theory 1 3 s.h.
Basic principles of linear circuits. Circuits concepts and laws, methods of
analysis, network theorems. Source-resistor circuits. Inductors and capacitors.
Analysis of AC circuits using phasors; impedance and admittance. Power
calculations in DC and AC circuits.
Prereq. or concurrent: MATH 1572.
ECEN 2633 Basic Circuit Theory 2 3 s.h.
Continuation of ECEN 2632. First- and second-order transients in RLC circuits.
Mutual inductance and transformers. Three-phase circuits. Transform
methods in circuit analysis, transfer functions, resonance.
Prereq.: ECEN 2632.
Prereq. or concurrent: MATH 2673.
ECEN 3710 Signals and Systems 3 s.h.
Operation and analysis of communication, control, and computer systems at
the signal level. Computer aided design tools and methods to analyze signals
and systems. Continuous and discrete-time transforms. Noise analysis, signal
detections, line codes, and multiplexing.
Prereq.: ECEN 2633, ECEN 1521 and MATH 3705.
ECEN 3711 Intermediate Laboratory 1 1 s.h.
Laboratory experiments and computer exercises in the areas of digital and
analog electronics and logic and computer circuits. Designed to accompany
the co-requisite courses.
Prereq.: ECEN 2612.
Prereq. or concurrent: ECEN 3733 and ECEN 3771.
ECEN 3712 Intermediate Laboratory 2 1 s.h.
Laboratory experiments and computer exercises in the areas of digital and
analog electronics, logic and computer circuits, and electromagnetics.
Designed to accompany the co-requisite courses.
Prereq.: ECEN 3711.
Prereq. or concurrent: ECEN 3742 and either ECEN 3772 or ECEN 3734.
ECEN 3717 Sensor Fundamentals 3 s.h.
Basic principles of sensors such as electro-chemical, -mechanical, -optical, and
thermal transducers. Signal conditioning and smart sensors. Applications to
process control and environmental systems.
Prereq.: MATH 3705, and either PHYS 2611 or ECEN 2632.
ECEN 3730 Microprocessors and Microcontrollers 3 s.h.
Organization and structured assembly language programming. Digital
controller devices and their relationships to processors and physical
environments. Two hours lecture and three hours laboratory per week.
Prereq.: ECEN 3733.
ECEN 3733 Digital Circuit Design 3 s.h.
Modern digital circuit analysis and design. Latches, flip-flops, registers,
counters, memories, programmable logic arrays, and arithmetic logic units.
Logic gate-level synthesis and computer simulation using CAD tools.
Synchronous and asynchronous finite-state machines.
Prereq.: ECEN 1521, ECEN 2633.
ECEN 3734 Computer Design 3 s.h.
Systematic methodologies for digital computer hardware and software
designs. VLSI circuits. SOPC, CPLD, and FPGA designs. Hardware description
languages.
Prereq.: ECEN 3733.
ECEN 3741 Electromagnetic Fields 1 3 s.h.
Maxwell's equations. Static electric and magnetic fields. Magnetic materials
and forces, dielectrics, conductance, capacitance, and inductance. Poisson's
and Laplace's equations.
Prereq.: ECEN 2633, prerequisite or concurrent MATH 3705.
ECEN 3742 Electromagnetic Fields 2 3 s.h.
Maxwell's equations. Time varying electric and magnetic fields. Electro-
mechanical devices, transmission lines, microwaves. Antennas and radiation.
Prereq.: ECEN 3741.
ECEN 3771 Digital and Analog Circuits 1 3 s.h.
Terminal characteristics of electronic devices such as diodes, BJTs (bipolar
junction transistors), FETs (field effect transistors), and operational amplifiers.
The design of digital circuits with these devices. Basic bias and small-signal
models for analog amplifiers. Computer-aided design and analysis.
Prereq.: ECEN 2633.
ECEN 3772 Digital and Analog Circuits 2 3 s.h.
Continuation of ECEN 3771. Bias and signal modeling for amplifier design.
Large-signal, small-signal and DC amplifiers. Single-stage, multistage and
power amplifiers. Frequency response. Applications with op amps such as
amplifiers, comparators, filters, and oscillators. Computer-aided design and
analysis.
Prereq.: ECEN 3771.
ECEN 4803 Linear Control Systems 4 s.h.
System modeling, responses and performance measures. Stability analysis by
root locus, Bode, and Nyquist plots. Computer-aided control system design.
Compensator design. Three hours lecture, three hours laboratory per week.
Prereq.: ECEN 2633, ECEN 3712, MATH 3705, MECH 2620.
ECEN 4803L Linear Control Systems Laboratory 0 s.h.
Linear Control Systems Laboratory.
ECEN 4811 Senior Laboratory 1 s.h.
Laboratory experiments and computer exercises in the areas of applied
electromagnetics, energy conversion. Designed to accompany the co-requisite
course.
Prereq.: ECEN 3712.
Prereq. or concurrent: ECEN 4844.
ECEN 4844 Electromagnetic Energy Conversion 3 s.h.
An examination of lumped electromagnetic parameters with development
of theoretical, experimental, and design parameters for electrical energy
conversion devices such as transformers, motors, and generators. Typical and
special applications.
Prereq.: ECEN 3741 or concurrent: MECH 2620.
ECEN 4851 VLSI System Design 3 s.h.
Basic MOSFET models. Layout of inverters, NAND, NOR, PLA, PAL and ROMs.
CMOS process and design rules. VLSI system design methodology and
computer EDA tools such as PSpice and layout editors.
Prereq.: ECEN 3771, ECEN 3733.
ECEN 4852 Neural Networks and Robotics 3 s.h.
Principles for control applications and robotics, direct inverse control, neural
networks, and fuzzy set theory. Applications including adaptive control, neural
networks for motion control and path planning in robotics.
Prereq.: ECEN 3733.
ECEN 4854 Principles of Electromagnetic Compatibility 3 s.h.
Review of electromagnetic theories. Techniques of electromagnetic
compatibility in electronic systems and computer hardware. Modeling and
simulation of transmission lines and circuits. Electromagnetic discharge
and grounding problems for high-frequency applications. Radio-frequency
emissions from electronic devices. Shielding techniques to prevent ESD and
EMI.
Prereq.: ECEN 3742 and MATH 3705.
ECEN 4855  Advanced Digital Control  3 s.h.
Prereq.: ECEN 3733.

ECEN 4856  Embedded System Design  4 s.h.
Fundamentals of small-scale and medium-scale embedded systems. Design techniques for processors, timers, input device interfacing, interrupt controllers, and drive circuits. Real-time operating system programming tools. Hardware-software co-designs. Three hours lecture, three hours laboratory.
Prereq.: ECEN 3733.

ECEN 4881  Modern Control System Design  3 s.h.
Advanced control system analysis and design. LQG, pole placement, state observer design. Introduction to system identification and adaptive controllers. MATLAB simulation and real-time implementation of controllers. Three hours lecture, three hours laboratory per week.
Prereq.: ECEN 4803.

ECEN 4899  Senior Design Project  4 s.h.
An electrical/computer engineering design problem is chosen or assigned; students work in teams. Proposals are presented which describe the design problem and approach to it. The final design is presented in written and oral forms. This capstone course is intended to mimic a typical industrial or research project and includes ethical and economical considerations with the engineering work. Three hour lecture/discussion, three hours of laboratory per week.
Prereq.: ECEN 4811 and 27 s.h. of ECEN courses.
Gen Ed: Capstone.

ECEN 4899L  Senior Design Project Lab  0 s.h.
Senior Design Project Lab.

ECEN 5800  Special Topics  1-3 s.h.
Special topics, new developments in Electrical Engineering. Subject matter, special prerequisites, and credit hours to be announced in advance of each offering. May be repeated with different subject matter to a maximum of 6 s.h.
Prereq.: Senior standing in Electrical and Computer Engineering.

ECEN 5807  Advanced Digital and Analog Circuits  3 s.h.
Chip circuitry for devices such as BJTs, CMOS, and ECL-based digital logic chips. Switching devices such as SCRs, triacs, and timers. Switching power supplies. Power amplifiers. Applications and specifications of off-the-shelf IC devices. Computer-aided design and analysis.
Prereq.: ECEN 3772.

ECEN 5808  Advanced Signals and Systems  3 s.h.
Communication and control system modeling and simulations; signal analysis in continuous-time, discrete-time and frequency domains. Advanced communication system applications.
Prereq.: ECEN 3710 and MATH 3705.

ECEN 5816  Theory and Fabrication of Solid-State Devices  3 s.h.
An introductory study of physical theory, design, and fabrication of discrete devices and integrated circuits. Electronic properties of semiconductors such as carrier concentration, energy gap, mobility, lifetime. Techniques of fabrication such as oxidation, diffusion, alloying ion implantation, metallization, masking.
Prereq.: ECEN 3741 and ECEN 3771.

ECEN 5817  Sensor Design and Application  3 s.h.
Designs and applications for measurement and control; includes electrochemical, -mechanical, -optical, and -thermal transducers. Signal conditioning and smart sensors.
Prereq.: ECEN 3771 or ECEN 3717.

ECEN 5830  Digital Signal Processing  3 s.h.
Discrete time signals and systems; discrete, fast, and inverse Fourier transforms. Digital filter analysis and design, digital signal processing applications. Two hours lecture, three hours laboratory.
Prereq.: ECEN 3710.

ECEN 5835  Computer Architecture with VHDL  4 s.h.
Use of hardware description languages to design computer components and systems. Arithmetic and logic units, control units, VHDL models for memories and busses, interfacing, transfer design. Survey of modern computer systems.
Prereq.: ECEN 3734.

ECEN 5840  Electric Power Systems  4 s.h.
Modeling of power system components. Power flow, faults, protection systems, and stability problems. Special projects and laboratory experiments including CAD applications for analysis, design, and simulation of power system networks. Three hours lecture, three hours laboratory per week.
Prereq. or concurrent: ECEN 4844.

ECEN 5850  Communications Applications  3 s.h.
Applicable technologies and "real-world" communication components and systems. Design and analysis tools. Emerging technologies, "killer apps", networking, data acquisition, and convergence.
Prereq.: ECEN 3710 or ECEN 5808.

ECEN 5860  Fundamental of Antenna Design and Application  3 s.h.
Examination of dipole, loop aperture, and microstrip antennas; array theory; radiation resistance, directivity, equivalent circuits, input impedance, and basic transceiver architecture. Investigation of practical applications of antennas and arrays in communications systems, radar systems and airborne navigation systems.
Prereq.: ECEN 3742 grade of "C" or better and 21 s.h. of ECEN courses.

ECEN 5879  Computer-Aided Design  3 s.h.
The design, analysis, and modeling of linear and nonlinear networks and systems using a simulation and modeling computer program. Development and use of library models of devices, subcircuits, and subsystems.
Prereq.: ECEN 2611 and 21 s.h. of ECEN courses.

ECEN 5890  Power Electronics  4 s.h.
SCRs, rectifier circuits, commutation techniques, AC controllers, converters, and inverters. Special projects and laboratory experiments including computer applications for analysis, design, and simulation of power electronics network. Three hours lecture, three hours laboratory per week.
Prereq.: ECEN 3771 and 21 s.h. of ECEN courses.

Bachelor of Engineering in Electrical Engineering, Biomedical Track

Through the Electrical Engineering program at Youngstown State University, you'll develop competency in all aspects of electrical engineering and its related fields. You'll take coursework anchored in engineering, math and physics that will allow you to solve complex problems and design intricate systems. Along the way, you'll also refine your communication skills and learn how to ethically and responsibly deploy your engineering skills.

Electrical engineers have homes in a large assortment of industries, from power generation and automotive manufacturing to biomedical development and consumer product design. You may even find yourself using your engineering expertise to serve your country in the military.

With your bachelor's degree in hand, you'll be the person advancing the products and systems that advance society.

MAJOR

Design projects, computer simulation and hands-on laboratory sessions are the pillars of the Electrical Engineering major at YSU. Students enrolled in the program may choose from three options that prepare graduates for a large variety of professional positions or advanced studies:

- Traditional Option (https://ysu.edu/academics/science-technology-engineering-mathematics/electrical-engineering-major/#panel0)
- Computer/Digital Option (https://ysu.edu/academics/science-technology-engineering-mathematics/electrical-engineering-major/#panel1)
Bachelor of Engineering in Electrical Engineering, Biomedical Track

- Biomedical Option (https://ysu.edu/academics/science-technology-engineering-mathematics/electrical-engineering-major/#panel2)

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<thead>
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<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
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</table>

### FIRST YEAR REQUIREMENT - STUDENT SUCCESS

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>S.H.</th>
</tr>
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### General Education Requirement

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### Major Requirements

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<td>Instrumentation and Computation Lab 1</td>
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<td>Instrumentation and Computation Lab 2</td>
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<td>Basic Circuit Theory 1</td>
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### Science

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<td>Organic Chemistry 2 and Organic Chemistry 2 Laboratory</td>
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<td>General Biology: Molecules and Cells and General Biology: Molecules and Cells Laboratory</td>
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<td>General Biology: Organisms and Ecology and General Biology: Organisms and Ecology Laboratory</td>
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<td>General Physics 1 and General Physics Laboratory 1</td>
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<td>Thermodynamics and Classical Statistical Dynamics</td>
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<td>Fundamentals of Programming and Problem-Solving</td>
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### Mathematics Minor - one course counts toward Gen Ed

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<td>MATH 1572</td>
<td>Calculus 2</td>
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<td>MATH 2673</td>
<td>Calculus 3</td>
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<td>MATH 3705</td>
<td>Differential Equations</td>
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<tr>
<td>MATH 3718</td>
<td>Linear Algebra and Discrete Mathematics for Engineers</td>
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The following two science courses are recommended for the biomedical option but do not count toward degree requirements:

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<tr>
<td>BIOL 3702</td>
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### Total Semester Hours

133-135

**Year 1**

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<td>ENGR 1500</td>
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<td>Engineering Concepts</td>
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<td>General Chemistry 1 and General Chemistry 1 Laboratory</td>
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<tr>
<td>ENGL 1550 or ENGL 1549</td>
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<tr>
<td>MATH 1571</td>
<td>Calculus 1</td>
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**Fall**

- **Semester Hours**: 15-16

**Spring**

- **Semester Hours**: 17

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<tr>
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<td>Engineering Computing</td>
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<tr>
<td>CHEM 1516 &amp; 1516L</td>
<td>General Chemistry 2 and General Chemistry 2 Laboratory</td>
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<td>Writing 2</td>
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**Year 2**

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<td>Basic Circuit Theory 1</td>
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<td>ECEN 2611</td>
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<td>PHYS 2610 &amp; 2610L</td>
<td>General Physics 1 and General Physics Laboratory 1</td>
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<td>PHIL 2626</td>
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**Fall**

- **Semester Hours**: 16

**Spring**

- **Semester Hours**: 3

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<th>Title</th>
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<td>Linear Algebra and Discrete Mathematics for Engineers</td>
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<td>Basic Circuit Theory 2</td>
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MECH 2620 Statics and Dynamics 3
CMST 1545 Communication Foundations 3

**Semester Hours** 16

### Year 3

#### Fall

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<th>COURSE</th>
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<tr>
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<td>ECEN 3771</td>
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<td>General Biology: Molecules and Cells and General Biology: Molecules and Cells Laboratory</td>
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| ISEN 3710 | Engineering Statistics |

**Semester Hours** 17

#### Spring

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<td>ECEN 3742</td>
<td>Electromagnetic Fields 2</td>
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<td>ECEN 4844</td>
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**Semester Hours** 17

### Year 4

#### Fall

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<td>Thermodynamics and Classical Statistical Dynamics</td>
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| General Education Requirement | 3 |

**Semester Hours** 18

#### Spring

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| General Education Requirement | 3 |
| General Education Requirement | 3 |

**Semester Hours** 17

**Total Semester Hours** 133-134

---

### Student Outcomes

The following (1 through 7) Student Outcomes support the program educational objectives. Attainment of these outcomes by students by the time of their graduation prepares graduating students to enter the professional practice of engineering.

1. An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
2. An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
3. An ability to communicate effectively with a range of audiences.
4. An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.
5. An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
6. An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
7. An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

---

### Bachelor of Engineering in Electrical Engineering, Computer/Digital Track

Through the Electrical Engineering program at Youngstown State University, you'll develop competency in all aspects of electrical engineering and its related fields. You'll take coursework anchored in engineering, math and physics that will allow you to solve complex problems and design intricate systems. Along the way, you'll also refine your communication skills and learn how to ethically and responsibly deploy your engineering skills.

Electrical engineers have homes in a large assortment of industries, from power generation and automotive manufacturing to biomedical development and consumer product design. You may even find yourself using your engineering expertise to serve your country in the military.

With your bachelor's degree in hand, you'll be the person advancing the products and systems that advance society.

### MAJOR

Design projects, computer simulation and hands-on laboratory sessions are the pillars of the Electrical Engineering major at YSU. Students enrolled in the program may choose from three options that prepare graduates for a large variety of professional positions or advanced studies:

- Traditional Option ([link](https://ysu.edu/academics/science-technology-engineering-mathematics/electrical-engineering-major/#panel0))
- Computer/Digital Option ([link](https://ysu.edu/academics/science-technology-engineering-mathematics/electrical-engineering-major/#panel1))
- Biomedical Option ([link](https://ysu.edu/academics/science-technology-engineering-mathematics/electrical-engineering-major/#panel2))

### COURSE TITLE S.H.

**FIRST YEAR REQUIREMENT - STUDENT SUCCESS**

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<td>PHYS 2610 &amp; 2610L</td>
<td>General Physics 1 and General Physics Laboratory 1</td>
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<td>PHIL 2626</td>
<td>Engineering Ethics</td>
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Arts and Humanities (1 course)
Social Science (1 course)

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Bachelor of Engineering in Electrical Engineering, Computer/Digital Track

### Major Requirements

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### Year 1

#### Fall

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### Year 2

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#### Spring

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### Year 3

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#### Spring

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#### Spring

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Total Semester Hours: 129-130
Student Outcomes

The following (1 through 7) Student Outcomes support the program educational objectives. Attainment of these outcomes by students by the time of their graduation prepares graduating students to enter the professional practice of engineering.

1. An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.

2. An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.

3. An ability to communicate effectively with a range of audiences.

4. An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.

5. An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.

6. An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.

7. An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

Bachelor of Engineering in Electrical Engineering, Traditional Track

Summary for Traditional Track

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See Curriculum section for courses in these areas that are common to the three options.

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Social and Personal Awareness 6

Major Requirements

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ECEN Electives

Select 9 s.h. of ECEN Electives ECEN 2600 and above 9

Mathematics Minor - one course counts toward Gen Ed

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Course List

Year 1

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Spring

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Semester Hours 16-17
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Semester Hours 16

### Year 2

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Semester Hours 16

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Semester Hours 16

### Year 3

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Semester Hours 16

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Semester Hours 16

### Year 4

**Fall**

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General Education Requirement 3

Semester Hours 17

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Semester Hours 13

Total Semester Hours 126-127

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**Student Outcomes**

The following (1 through 7) Student Outcomes support the program educational objectives. Attainment of these outcomes by students by the time of their graduation prepares graduating students to enter the professional practice of engineering.

1. An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
2. An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
3. An ability to communicate effectively with a range of audiences.
4. An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.
5. An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
6. An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
7. An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

---

**Minor in Electrical and Computer Engineering**

For students with little or no background:

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Semester Hours 19

For students with background in math or computer science:

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Total Semester Hours 19

For students with background in physics:

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Semester Hours 19

For students with background in math or computer science:

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Total Semester Hours 19

For students with background in physics:

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<td>ECEN 1521</td>
<td>Digital Circuits</td>
<td>4</td>
</tr>
<tr>
<td>&amp; 1521L</td>
<td>and Digital Circuits Laboratory</td>
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</tr>
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</table>

Semester Hours 19

For students with background in math or computer science:

<table>
<thead>
<tr>
<th>COURSE</th>
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<tbody>
<tr>
<td>ECEN 2632</td>
<td>Basic Circuit Theory 1</td>
<td>3</td>
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<td>ECEN 2611</td>
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<td>ECEN 2633</td>
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<tr>
<td>ECEN 3711</td>
<td>Intermediate Laboratory 1</td>
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Total Semester Hours 19

For students with background in physics:

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Semester Hours 19

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Semester Hours 19

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Total Semester Hours 19
Mechanical, Industrial, and Manufacturing Engineering

(330) 941-3016

Moser Hall, Room 2510

The Mechanical, Industrial, and Manufacturing Engineering program is dedicated to furthering the missions and objectives of the university and the College of Science, Technology, Engineering, and Mathematics. We focus on providing an opportunity for quality education in mechanical engineering and industrial and systems engineering while offering professional service to local and regional industry and to the public. The program is committed to providing its students with a broad, general education and an up-to-date technological curriculum in a four-year undergraduate program. It also offers an application-oriented evening Master of Science in Engineering program to practicing engineers and recent engineering graduates. An online Master of Engineering program is also available.

Professor

Afirah Bobbie, Ph.D., Assistant Professor
S. Cory Brozina, Ph.D., Assistant Professor
Kyosung Choo, Ph.D., Associate Professor
Kevin Disotell, Ph.D., Assistant Professor
Hazel Marie, Ph.D., Professor
Hojjat Mehri, Ph.D., Professor
Stefan Moldovan, Ph.D., Assistant Professor
Nazanin Naderi, Ph.D., Assistant Professor
Alexander H. Pesch, Ph.D., Assistant Professor
Jae Joong Ryu, Ph.D., Associate Professor
Elvin B. Shields, Ph.D., Professor
Virgil C. Solomon, Ph.D., Associate Professor
Jason Walker, Ph.D., Assistant Professor
Darrell R. Wallace, Ph.D., Professor

Lecturer

Timothy J. Daugherty, Ph.D., Lecturer
Sharmin N. Mithy, M.S., Lecturer
Anthony Viviano, M.S., Lecturer

Majors

• Industrial and Systems Engineering Program (p. 534)
• Mechanical Engineering Program (p. 537)
• Manufacturing Engineering Program (p. 541)

Minors

• Minor in Industrial and Systems Engineering (p. 541)
• Minor in Mechanical Engineering (p. 541)

Mechanical Engineering

MECH 1500 Drawing Fundamentals 3 s.h.
Visualization of objects for engineering communication. Freehand sketching, orthographic projection, multiview drawing, auxiliary views, sectional views, and dimensioning.
Prereq.: High school geometry or equivalent.

MECH 1501 Engineering Communication with CAD 3 s.h.
Computer-aided drawing for engineering communication. 2D multiview drawings, 3D modeling including wire frame, solid, and surface models. Final design project using these tools is required. Two hours lecture, three hours laboratory per week.
Prereq.: MECH 1500 or equivalent.

MECH 1560 Engineering Communication with CAD 2 s.h.
Commercially available software typically used in engineering practice will be used to develop traditional 2D engineering drawings and 3D solid models representing engineering components and systems. Teams of students will complete an engineering design project. One hour lecture and three hours laboratory per week.
Prereq.: ENGR 1560.

MECH 2603 Thermodynamics 1 3 s.h.
Thermodynamic properties of gases and vapors, and their relationships in energy transformations. The First and Second Laws of thermodynamics. Introduction to thermodynamic cycles and efficiencies of power and refrigeration systems.
Prereq.: MATH 1572, CHEM 1515.

MECH 2604 Thermodynamics 2 3 s.h.
Irreversibility and exergy, mixtures and solutions; psychometry. Introduction to phase and chemical equilibrium.
Prereq.: MECH 2603.

MECH 2606 Engineering Materials 3 s.h.
Properties and uses of engineering materials, manufacturing processes, including heat treatments and forming operations. Introduction to mechanical testing methods. Listed also as MTEN 2606.
Prereq.: MATH 1571 or MATH 1585H.

MECH 2620 Statics and Dynamics 3 s.h.
Principles of engineering mechanics as applied to statics and dynamics, Vector applications to forces and moments; centroid and center of gravity; static equilibrium. Kinematics of particles; Newton’s laws; work-energy; and impulse momentum techniques using vector approach.
Prereq.: MATH 1572 and PHYS 2610 or concurrent.

MECH 2641 Dynamics 3 s.h.
Kinematics of particles and rigid bodies. Newton’s laws of motion, work-energy, and impulse momentum techniques applied to particle and rigid body motion using a vector approach.
Prereq.: CEEN 2601.

MECH 3708 Dynamic Systems Modeling 4 s.h.
Mathematical modeling of linear mechanical, electrical, thermal, fluid, and mixed systems. State space variables. Frequency response. Computer simulation using modern computer tools. Three hours lecture and three hours laboratory per week.
Prereq.: MECH 2641, ECEN 2614, MATH 3705.

MECH 3720 Fluid Dynamics 3 s.h.
Physical properties of fluids. Governing equations of fluid dynamics; forces on bodies due to incompressible fluid motion. Dimensional analysis and similitude. Analysis of energy losses in pipe flows. Concept of the viscous boundary layer.
Prereq.: MECH 2603; MECH 2641; MATH 3705.
MECH 3720L  Fluid Dynamics Laboratory  1 s.h.
Introduction to equipment, data acquisition, and techniques for measurement and computation of fluid flows in engineering applications. Effective technical communication skills, analysis and interpretation of data in teams are emphasized.
Prereq.: MECH 3720.

MECH 3725  Heat Transfer 1  3 s.h.
Prereq.: MECH 3720 or concurrent.

MECH 3742  Kinematics of Machines  3 s.h.
Position, velocity, and acceleration analysis of mechanisms. Design of link and cam mechanisms to perform desired machine functions. Graphical, analytical, and commercial software applications.
Prereq.: MECH 2641, ENGR 1560 or MECH 1560.

MECH 3751  Stress and Strain Analysis 1  3 s.h.
Analysis of internal forces, stresses, strains, and deflections in three dimensions. Dynamic loading including impact and fatigue. Theories of failure and energy methods. Must be taken concurrently with MECH 3751L.
Prereq.: EEEN 2602, MECH 2606.

MECH 3751L  Stress and Strain Analysis 1 Laboratory  1 s.h.
Transmission and reflection photoelasticity. State and dynamic strain gage applications using computer-aided data acquisition. Three hours laboratory per week.
Concurrent with: MECH 3751.

MECH 3762  Design of Machine Elements  3 s.h.
Application of fundamental engineering principles to the design of various elements found in machines. Elements include connections, shafts, keys, couplings, springs, gears, belts, chains, bearings, clutches, brakes, screws, etc. Must be taken concurrently with MECH 3762L.
Prereq.: MECH 2641 and MECH 3751.

MECH 3762L  Design of Machine Elements Laboratory  1 s.h.
Practical design problems incorporating analysis, material selection, and sizing of machine components utilizing the computer. Three hours laboratory per week. Must be taken concurrently with MECH 3762.

MECH 4800  Special Topics  3 s.h.
Special topics and new developments in mechanical engineering. Subject matter, credit hours, and special prerequisites are announced in advance of each offering. May be repeated to a maximum of 8 s.h. with different content.
Prereq.: Junior standing in Mechanical Engineering, or consent of instructor.

MECH 4800G  Special Topics Additive and Digital Manufacturing  3 s.h.
Special topics and new developments in mechanical engineering. Subject matter, credit hours, and special prerequisites are announced in advance of each offering. May be repeated to a maximum of 8 s.h. with different content.
Prereq.: Junior standing in Mechanical Engineering, or consent of instructor.

MECH 4808  Mechanical Systems Design 1  2 s.h.
Detailed design of a mechanical engineering system utilizing expertise expected of a new graduate in an industry setting. Design methodology, case studies, oral presentations, and written reports prepare the student to function as part of a design team on a capstone project. MECH 4809 must be taken at the next offering after completing 4808. Grading in MECH 4808 is Traditional/PR. Two hours lecture per week.
Prereq.: MECH 3708, MECH 3725, MECH 3742, and MECH 3762.
Gen Ed: Capstone.

MECH 4808L  Mechanical Systems Design Laboratory  1 s.h.
Supplemental activities related to MECH 4808, such as discussion and seminars on industry practices and standards, computer software applications, experimental verification, etc. Three hours laboratory per week. Must be taken concurrently with MECH 4808.
Gen Ed: Capstone.

MECH 4809  Mechanical Systems Design 2  3 s.h.
Detailed design of a mechanical engineering system utilizing expertise expected of a new graduate in an industry setting. Design methodology, case studies, oral presentations, and written reports prepare the student to function as part of a design team on a capstone project. MECH 4809 must be taken at the next offering after completing 4808. Three hours lecture per week.
Prereq.: MECH 4808.
Gen Ed: Capstone.

MECH 4809L  Mechanical Systems Design Laboratory  1 s.h.
Supplemental activities related to MECH 4808 and MECH 4809, such as discussions and seminars on industry practices and standards, computer software applications, experimental verifications, etc. Three hours laboratory per week. MECH 4808L must be taken concurrently with MECH 4808 and MECH 4809L must be taken concurrently with MECH 4809.

MECH 4823  Heating, Ventilation, and Air Conditioning  3 s.h.
Prereq.: MECH 3725.

MECH 4825L  Heat Transfer and Thermodynamics Laboratory  1 s.h.
Experiments involving basic measurement techniques, power and refrigeration cycles, heat transfer, heat exchangers, and energy systems. Three hours laboratory per week.
Prereq.: MECH 3720, MECH 3725.

MECH 4835  Thermal Fluid Applications  3 s.h.
Application of the principles of thermodynamics, fluid dynamics, and heat transfer to design. Design, analysis and computer simulation of thermal fluid systems and components.
Prereq.: MECH 3725.

MECH 5811  Solar Engineering  3 s.h.
Radiational characteristics of solar energy, glass materials and selective coatings. Analysis of flat plate collectors, concentrators, and thermal storage. System simulation and economic analysis for optimization of basic solar systems.
Prereq.: PHYS 2611, MECH 3725 or consent of chairperson.

MECH 5820  Turbulence  3 s.h.
Physics of turbulence in thermal-fluid engineering systems; statistical descriptions, energy cascade and scales of turbulent motion. Modeling and simulation of turbulent flows. Examples of turbulence in mixing layers, combustion, and wall-bounded flows.
Prereq.: MECH 3720 or PHYS 3705 or CHEN 3786 (or equivalent).

MECH 5825  Heat Transfer 2  3 s.h.
Advanced topics in heat transfer. Multi-dimensional conduction, free convection, phase change heat transfer and thermal radiation. Integration of analytical, numerical, and computational methods into design projects.
Prereq.: MECH 3708 and MECH 3725.

MECH 5836  Fluid Power and Control  3 s.h.
Prereq.: MECH 3725.

MECH 5842  Kinetics of Machines  3 s.h.
Three dimensional kinematics and dynamics of machines. Dynamic analysis and design; balancing of machines.
Prereq.: MECH 3742.

MECH 5852  Stress and Strain Analysis 2  3 s.h.
Continuation of MECH 3751. Introduction to applied elasticity theory including plane stress and strain and stress functions. Plastic and creep behavior of materials. Introduction to instability. Emphasis on design applications.
Prereq.: MECH 3751, MECH 3751L, MATH 3705.
MECH 5872 Engineering Acoustics 3 s.h.
The nature of sound and its propagation; analysis and control of sound and noise production in mechanical equipment; transmission and absorption of sound in engineering materials, ultrasonics, structural acoustics, base measurements, and equipment.
Prereq.: MECH 3708.

MECH 5881 Mechanical Vibrations 3 s.h.
Introduction to mechanical vibrations: single and multi-degree of freedom systems, free and forced vibrations, impedance and modal analysis including applications.
Prereq.: MECH 3708.

MECH 5881L Mechanical Vibrations Laboratory 1 s.h.
Introduction to vibrations measurements. Experiments with mechanical systems, computer simulation of vibration systems. Experimental determination of component models and parameters. Three hours laboratory per week.
Prereq.: MECH 5881.

MECH 5884 Finite Element Analysis 3 s.h.
Fundamental principles of finite element analysis with emphasis on applications to design in areas of stress analysis, vibrations, and heat transfer. Use of commercial software.
Prereq.: MECH 3708, MECH 3725, MECH 3751.

MECH 5885 Computational Fluid Dynamics 3 s.h.
Applied numerical analysis, including solution of linear algebraic equations and ordinary and partial differential equations; modeling of physical processes, including fluid flow and heat and mass transfer; use of general purpose computer codes, including commercial computational fluid dynamics software packages.
Prereq.: MECH 3720 and MECH 3725.

MECH 5892 Control of Mechanical Systems 3 s.h.
Introduction to theory of feedback and control. Performance and stability of linear systems. Design of feedback control systems. Practical application and introduction to state-space methods. Two hours lecture and three hours laboratory per week.
Prereq.: MECH 3708.

Industrial Engineering
ISEN 1560 Principles of Systems Design 2 s.h.
An introduction to creative thought processes and analytical tools that are used to develop human usable systems. Cognitive theory provides a foundation for analyzing human-machine interactions within systems. Cases are used to elucidate accident causation theory and exercise the application of risk reduction strategies.
Prereq.: ENGR 1550.

ISEN 3710 Engineering Statistics 3 s.h.
Applications of data collection and analysis techniques to engineering problems. Techniques for data structuring, data modeling, parameter estimation, and design of experiments utilizing engineering data.
Prereq.: MATH 1571.

ISEN 3716 Systems Analysis and Design 3 s.h.
Analysis and design of systems. Decomposition of large systems into subsystems. Analysis, modeling, and design of subsystems. Integration of subsystems. Visual BASIC programming as a modeling tool.
Prereq.: MATH 1571.

ISEN 3720 Statistical Quality Control 3 s.h.
Prereq.: ISEN 3710 or equivalent.

ISEN 3723 Manufacturing Processes 3 s.h.
Introduction to properties and uses of engineering materials. Introduction to mechanical testing methods, metrology, tolerances, testing and inspection; semi-finished product manufacturing; macro-processing (forming, casting, powder metallurgy, metal working, composite fabrication); joining; nontraditional manufacturing processes; and surface processing. Prereq: MATH 1572.

ISEN 3724 Engineering Economy 3 s.h.
The analysis and evaluation of factors that affect the economic success of engineering projects. Topics include interest, depreciation, cost classification, comparison of alternatives, make-buy decisions, replacement models and after-tax analysis.
Prereq.: MATH 1571.

ISEN 3727 Simulation of Industrial Engineering Systems 3 s.h.
Techniques for the digital simulation of industrial engineering systems which can be represented via discrete event models. The generation of random variables, shaping of probability distributions, model structuring, model verification, and the simulation of inventory, queuing, and quality control systems in a high-level structured programming language. A special-purpose simulation language for expanding the class of problems which can be economically modeled.
Prereq.: ISEN 3710, ISEN 3716.

ISEN 3736 Methods Engineering 2 s.h.
Techniques for analysis of task performance, the use of process charts, and various methods of work simplification, human-machine relation analysis. Theory and practice of time study and other methods of measuring and establishing performance level and productivity.
Prereq.: ISEN 3710 or equivalent.

ISEN 3736L Methods Engineering Laboratory 1 s.h.
Practice in analyzing and recording tasks. Determination of time standards and productivity requirements. Analysis and evaluation of actual plant operations. Taken concurrently with ISEN 3736. Three hours laboratory per week.

ISEN 3745 Accounting for Engineers 3 s.h.
Prereq.: ISEN 3724 or equivalent.

ISEN 4810 Special Topics 3 s.h.
Special topics and new developments in Industrial Engineering. Subject matter, credit hours, and special prerequisites to be announced in advance of each offering.
Prereq.: senior standing in Industrial Engineering or consent of instructor.

ISEN 4821 Capstone Design 1: Manufacturing and Service Systems 3 s.h.
The application of engineering techniques to the analysis, design, layout, and justification of manufacturing and service facilities. Subjects covered include, equipment selection, process flow, and material flow. The system design involves field investigation, acquisition and analysis of data, use of computer-aided facilities planning and design software, preparation of drawings, and writing a final report. Grading is Traditional/PR.
Prereq.: ISEN 3723, ISEN 3736, ISEN 5801, and 96 s.h. of engineering degree credits.
Gen Ed: Capstone.

ISEN 4822 Capstone Design 2: Logistics Systems 3 s.h.
Analysis, planning and design of material handling, storage/warehouse and logistics systems. The fundamental analytic tools, approaches, and techniques which are useful in the planning, design, layout, and operation of logistics systems and integrated supply chains. Development and use of fundamental models to illustrate the underlying concepts involved in both intra- and inter-company logistics operations.
Prereq.: ISEN 4821.
Gen Ed: Capstone.
ISEN 5801 Operations Research 1 3 s.h.
Formulation and solution of engineering problems using linear programming. Model formulation, the primal, dual, and transportation simplex methods, duality theory, and sensitivity analysis.
Prereq.: MATH 2673.
ISEN 5811L Manufacturing Practices I Laboratory 1 s.h.
Experimental analysis of manufacturing processes. Process control and data acquisition. Experimental design applied to processes including polymer processes, casting, machining, and joining. Three hours laboratory.
Prereq. or concurrent ISEN 3723.
ISEN 5812L Manufacturing Practices 2 Laboratory 1 s.h.
Prereq. or concurrent ISEN 5823.
ISEN 5820 Advanced Quality for Engineers 3 s.h.
Applications and practices of quality control in industry. Engineering and administrative aspects of quality control programs, process control, and acceptance sampling. Application of quantitative methods to the design and evaluation of engineered products, processes, and systems.
Prereq.: ISEN 3720.
ISEN 5823 Automation 3 s.h.
Principles and applications of sensing, actuation and control. Emphasis on hydraulic and pneumatic systems. Industrial process controllers, sensors and machine vision. Design and cost considerations for industrial automation applications.
Prereq.: MECH 2641, ECEN 2614 or consent of instructor.
ISEN 5825 Advanced Engineering Economy 3 s.h.
An extension of the topics in engineering economy. Analysis of rationale and norm of decision making, risk and uncertainty models, utility theory, measurement of productivity, and advanced project comparison methods.
Prereq.: ISEN 3724.
ISEN 5830 Human Factors Engineering 3 s.h.
Various aspects of human factors in the design of human-machine systems and environments. Study of human sensory, perceptual, mental, psychomotor, and other characteristics; techniques of measuring human capabilities, limitations, safety, comfort, and productivity.
Prereq.: MATH 2673.
ISEN 5850 Operations Research 2 3 s.h.
Formulation and solution of industrial engineering problems using operational research models. Topics include queueing models and the specialization of linear models to equipment replacement, project planning, assignment, and transshipment problems.
Prereq.: ISEN 5801.
ISEN 5880 Management of Technology 3 s.h.
The course discusses major topics in management of technology and innovations. Dynamics of technology innovation, sources of technology innovations, corporate technology strategy, collaboration and intellectual property, structures and process for innovations, idea generation, commercialization of technology and innovations, and market entry.
Prereq.: Senior standing or consent of instructor.
ISEN 5881 Competitive Manufacturing Management 3 s.h.
Basic principles of manufacturing competitiveness. The role of engineers in promoting competitiveness. Discussion of new technologies used in modern manufacturing management including, continuous improvement, waste elimination, JIT, lean production systems, setup time reduction, equipment maintenance/improvement, total quality management, and supply chain management.
Prereq.: ISEN 3723 or consent of instructor.
Student Outcomes
The curriculum is structured to achieve the following outcomes as prescribed by ABET:

1. an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics
2. an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors
3. an ability to communicate effectively with a range of audiences
4. an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts
5. an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives
6. an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions
7. an ability to acquire and apply new knowledge as needed, using appropriate learning strategies

Industrial and Systems Engineering Annual Enrollment and Graduation Data
The Industrial and Systems Engineering BE Program has been accredited by the engineering accreditation commission of ABET, http://www.abet.org/.

Term Enrollment
<table>
<thead>
<tr>
<th>Academic Year</th>
<th>Degree Awarded</th>
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<tr>
<td>2012-2013</td>
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<tr>
<td>2013-2014</td>
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<td>2014-2015</td>
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<td>2015-2016</td>
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<td>2016-2017</td>
<td>14</td>
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<tr>
<td>2017-2018</td>
<td>18</td>
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</table>

Industrial and Systems Engineering Laboratories
The industrial and systems engineering laboratory spaces are located in Moser Hall and are equipped with hardware, software and networks to serve experiences within the curriculum that are hands on, team based, and communications or computational intensive. Laboratory experiences develop capabilities to design detailed components and to integrate solutions into large scale systems. Successively more challenging assignments are taken on throughout the curriculum and culminate in comprehensive experiences in the capstone facilities design sequence.

The industrial and systems engineering program makes optimum use of the Engineering Computing Complex, which is equipped with state-of-the-art computation, design, and communication hardware and software of a multi-disciplinary nature.

The ISE Project Laboratory is focused on team-based activities throughout the curriculum and particularly serves the methods engineering, human factors engineering and facilities design areas. At its core is a network of computing stations equipped with modern industrial and systems engineering software. Data collection and processing software supports video analysis of human performance, workspace and manufacturing cell design, facility layout, flow analysis and line balancing. The goal of this laboratory is to be able to cover any topic from the planning of initial resources for a start-up enterprise to the distribution of goods and services in global networks.

The Automation Laboratory Suite is a collection of spaces where students at all levels can learn and achieve together with an opportunity to make sustainable contributions to an initial or on-going project experience. It encompasses programmable robots, programmable logic controllers, vibratory bowl feeders, reciprocating feeders, power conveyors and numerous actuator and sensing devices.

The Manufacturing Laboratory Suite consists of several spaces containing equipment for rapid prototyping, casting processes, plastic injection molding and blow molding processes, CNC machining processes, sheet metal processing and instrumentation for inspection, measurement, and testing.

For more information, visit Industrial And Systems Engineering (http://www.ysu.edu/academics/science-technology-engineering-mathematics/industrial-and-systems-engineering-major/).

Cooperative Education
The industrial and systems engineering program strongly encourages its students to actively participate in the optional cooperative education program. The parallel co-op arrangement which combines work and study each semester is recommended. However, full-time employment in the summer can also be included. Students must register for a co-op course and submit documentation as specified by professional practice office. Currently a substitution of one elective course with three co-op experiences is allowed.

Advisement
The industrial and systems engineering program specifies mandatory advisement. Every student in the program is advised every semester before his or her registration. Students cannot finalize their registration without approval of the faculty advisor or program coordinator.

Accreditation
The Industrial Engineering BE program has been accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org/.

Industrial & Systems Engineering Program

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<tr>
<td>YSU 1500</td>
<td>Success Seminar</td>
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<td>or SS 1500</td>
<td>Strong Start Success Seminar</td>
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<td>or HONR 1500</td>
<td>Intro to Honors</td>
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General Education Requirements

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<td>ENGL 1550</td>
<td>Writing 1</td>
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<td>Writing 1 with Support</td>
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<td>ENGL 1551</td>
<td>Writing 2</td>
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<td>CMST 1545</td>
<td>Communication Foundations</td>
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<td>MATH 3705</td>
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<td>Differential Equations or Linear Algebra and Matrix Theory</td>
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<td>Science Courses</td>
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<td>PHYS 2611</td>
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<tr>
<td>PHIL 1561 Technology and Human Values</td>
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<tr>
<td>PHIL 2626 Engineering Ethics</td>
<td>3</td>
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<tr>
<td>SOC 1500 Introduction to Sociology</td>
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<tr>
<td>PSYC 1560 General Psychology</td>
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<tr>
<td>Mathematics requirement (met through MATH in the major)</td>
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<tr>
<td>Arts and Humanities (6 s.h.)</td>
<td>6</td>
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<tr>
<td>Social Science (6 s.h.)</td>
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<tr>
<td>Natural Science (2 courses; one with lab) (6-7 s.h.)</td>
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<td>ISEN 3720 Statistical Quality Control</td>
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<tr>
<td>ISEN 3723 Manufacturing Processes</td>
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<td>ISEN 3724 Engineering Economy</td>
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<td>ISEN 3727 Simulation of Industrial Engineering Systems</td>
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<tr>
<td>ISEN 3736 Methods Engineering</td>
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<td>ISEN 3745 Accounting for Engineers</td>
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<tr>
<td>ISEN 4821 Capstone Design 1: Manufacturing and Service Systems</td>
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<td>ISEN 4822 Capstone Design 2: Logistics Systems</td>
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<td>ISEN 5801 Operations Research 1</td>
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<td>ISEN Electives (4 courses from the list below))</td>
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<td>ISEN 5823 Automation</td>
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<td>ISEN 5830 Human Factors Engineering</td>
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<td>ISEN 5850 Operations Research 2</td>
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<tr>
<td>ISEN 5881 Competitive Manufacturing Management</td>
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<td><strong>Other Engineering Courses</strong></td>
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<td>ENGR 1550 Engineering Concepts</td>
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<tr>
<td>ENGR 1560 Engineering Computing</td>
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<td>CEEN 2601 Statics</td>
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<tr>
<td>ECEN 2614 Basics of Electrical Engineering</td>
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<td>MECH 2606 Engineering Materials</td>
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<td>CSIS 2610 Programming and Problem-Solving</td>
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<td>ISEN 5811L Manufacturing Practices I Laboratory</td>
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<tr>
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<td>MATH 1572 Calculus 2</td>
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<tr>
<td>Math Elective</td>
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<tr>
<td>MATH 3705 or MATH 3720</td>
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<tr>
<td>Differential Equations or Linear Algebra and Matrix Theory</td>
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<td>FNUT 1551 Normal Nutrition</td>
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<td>COUN 1587 Introduction to Health and Wellness in Contemporary Society</td>
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<tr>
<td>ENGL 1550 Writing 1 or ENGL 1549 Writing 1 with Support</td>
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<tr>
<td>CHEM 1515 General Chemistry 1 &amp; 1515L General Chemistry 1 Laboratory</td>
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<td>MATH 1572 Calculus 2</td>
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<td>PHYS 2610 General Physics 1</td>
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<td>ISEN 3710 Engineering Statistics</td>
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<td>ISEN 3724 Engineering Concepts</td>
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<tr>
<td>MATH 2673 Calculus 3</td>
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<td>CSIS 2610 Programming and Problem-Solving (others with consent of Program Coordinator)</td>
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<td>CMST 1545 Communication Foundations</td>
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<td>ISEN 3716 Systems Analysis and Design</td>
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<td>ISEN 3736 Methods Engineering</td>
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<td>ISEN 3736 &amp; 3736L Methods Engineering and Methods Engineering Laboratory</td>
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<td>PHYS 2611 General Physics 2</td>
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<td>ISEN 3723 Manufacturing Processes</td>
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<td>ISEN 3727 Simulation of Industrial Engineering Systems</td>
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<td>ISEN 3745 Accounting for Engineers</td>
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<tr>
<td>ECEN 2614 Basics of Electrical Engineering (others with consent of Program Coordinator)</td>
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<td>ISEN 3720 Statistical Quality Control</td>
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<td>ISEN Elective 1 (Spring)</td>
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</tr>
<tr>
<td>ISEN Elective 2 (Spring)</td>
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<tr>
<td>MATH Elective</td>
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<td>GER Elective (SS)</td>
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<td><strong>Fall</strong></td>
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<td>ISEN 4821 Capstone Design 1: Manufacturing and Service Systems</td>
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<td>ISEN 5801 Operations Research 1</td>
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</tr>
<tr>
<td><strong>Semester Hours</strong></td>
<td><strong>15</strong></td>
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</table>
The curriculum is structured to achieve the following outcomes as prescribed by ABET:

1. an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics
2. an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors
3. an ability to communicate effectively with a range of audiences
4. an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts
5. an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives
6. an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions
7. an ability to acquire and apply new knowledge as needed, using appropriate learning strategies

**Bachelor of Engineering in Mechanical Engineering**

Welcome to YSU’s Mechanical Engineering program. We offer Bachelor of Engineering (BE) and Master of Science in Engineering (MSE) degrees in Mechanical Engineering. The undergraduate program provides a strong background in mathematics, the sciences, and fundamentals of engineering, as well as tracks in the design and analysis of solid mechanics systems, thermal fluid flow systems, and dynamic systems. In addition to a quality education, most students participate in co-op or internship job assignments during their time with us, making them more marketable upon completion of their degrees. Graduates of the program enjoy placement in many areas of the diverse mechanical engineering job market.

I hope that you find this web page informative. If you have any additional questions, please contact me.

Hazel Marie, Ph.D., P.E.

Department of Mechanical, Industrial and Manufacturing Engineering

Phone: (330) 941-3015

E-mail: hmarie@ysu.edu

Mechanical engineering is the branch of the engineering profession that deals with:

- the conversion and use of energy
- the design of machines and engines
- the instrumentation and control of physical processes, systems and environments

The challenge of mechanical engineering is to use the principles of mathematics, along with the physical and thermal sciences, to develop and construct well designed machines and machine systems. Mechanical engineers are concerned with the practical purpose and function of a machine or system, as well as its design for strength, reliability, safety, economy, and appearance.

**Program Mission**

The mission of the mechanical engineering program is to further the missions and objectives of the University and the College of Science, Technology, Engineering and Mathematics by providing an opportunity for a quality education in Mechanical Engineering to the people it serves, particularly those in northeast Ohio and western Pennsylvania. The program also strives to provide professional service to the local and regional industry and to the public. The program is committed to meeting regional and state-wide priorities in higher education by providing its students with a broad, general education and an up-to-date technological curriculum in a four-year undergraduate program, and an application-oriented evening graduate program, offering a Master of Science in Engineering degree to practicing engineers and recent engineering graduates. The program also strives to enhance quality research and scholarly activities to be integrated with teaching and meet the needs of the region by providing area schools, businesses, industries, and government agencies with technical expertise.

**Program Educational Objectives**

The program educational objectives of the mechanical engineering undergraduate program are to educate graduates who will be professional, productive, and ethical members of society. As they progress professionally after graduation, our alumni will do the following:
1. Demonstrate successful application of mechanical engineering knowledge and skills through:
   a. employment in leadership roles in industry, academia, government, or other organizations
   b. engagement in research and development in graduate study or industry
   c. analytical problem solving in less traditional careers such as law, medicine, business, public policy, secondary education, service industries, etc.
   d. mentorship of younger engineers in careers involving management or entrepreneurship

2. Demonstrate the commitment to lifelong learning through:
   a. active participation in professional development opportunities in their disciplines; such as conferences, short courses, graduate education
   b. development of new knowledge and skills necessary for new areas of expertise or careers
   c. adaption of their fundamental engineering knowledge for effectiveness in changing global markets and workforce trends

3. Demonstrate active engagement in professional service through:
   a. application of their engineering knowledge to advance society and to help solve technical and societal problems
   b. engagement in activities that promote sustainable economic development that enhances the quality of life
   c. promotion of the engineering profession as a source of societal good
   d. participation in community activities where their engineering knowledge adds significantly to their contributions

These Program Educational Objectives describe long-term accomplishments for which we seek to prepare the graduates of Youngstown State University mechanical engineering program. It is expected that progress toward these objectives is measurable.

**Student Outcomes**

The YSU mechanical engineering program student outcomes ensure that our graduates have been given the skills to attain the program educational objectives after graduation. Student outcomes for direct assessment are ABET specified outcomes (1) through (7). Our students are expected to graduate with:

1. **Engineering Expertise** - an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics

2. **Design Expertise** - an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors

3. **Communication Skills** - an ability to communicate effectively with a range of audiences

4. **Professional Responsibility** - an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts

5. **Teamwork Competency** - an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives

6. **Experimental Competency** - an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions

7. **Life-long Learning** - an ability to acquire and apply new knowledge as needed, using appropriate learning strategies

**Accreditation**

The Mechanical Engineering BE program has been accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org (http://www.abet.org/).

**Annual Enrollment and Graduation Data**

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<th>Term</th>
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<td>2015-2016</td>
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<td>2016-2017</td>
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<td>2017-2018</td>
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</table>

**Vision Statement**

Mechanical engineering and mechanical engineering education, in particular, face dramatic challenges in the future due to rapidly changing technologies and a new pattern of societal and industrial demands. The vision of the program is to meet these challenges and exceed the expectations of its constituents by focusing on the following primary strategies of the program:

- Continuous improvement of an educational environment for outstanding teaching and learning
- Development of a productive research program through a strategic focus on technology development in emerging areas such as green energy, computer simulation, and nanotechnology
- Successful co-op and internship programs that provides students with on-the-job training opportunities
- An assessment program and procedures in order to insure a high quality program focusing on the needs of the program's constituents (the students, alumni, employers, faculty, administrations, community and the general public)
- Healthy enrollment that facilitates diversification of curriculum and faculty research and professional development

In order to achieve its educational objectives and to further the missions and objectives of the University and the College, the program provides an educational environment, teeming with opportunities for students to learn and acquire essential knowledge and skills that are defined in the ABET Criteria 2000, through its curriculum and extra-curricular activities. The program maintains undergraduate and graduate curricula that are well balanced in engineering fundamentals, state-of-the-art technology, and real-world engineering applications, in the primary specialty areas of fluid thermal sciences, and mechanics of deformable bodies. The undergraduate curriculum also contains courses that foster:
• critical and independent thinking
• decision making
• development of interpersonal communication and a life-long learning attitude
• working within a team
• integration of knowledge, skills, ethics, and personal responsibility

Although the program intends to cultivate the capabilities of its students’ problem solving, fundamental and advanced engineering analyses, design, research, and development, it also intends to provide the students with maximum exposure to hands-on, experimental skills to insure the high quality of its graduates. Through courses like stress analysis, thermal fluid applications, and finite element analysis, students will acquire strong tools for design and pertinent knowledge to solve real-world engineering problems. Our emphasis on engineering applications, computer simulation, and hands-on experience are complementary to each other and encourage students to apply analytical methods to engineering problems.

This approach enhances the effectiveness of teaching and also facilitates the students’ understanding of abstract and difficult subjects. The ultimate goal of the program is to provide the society and industry with “whole person” mechanical engineers with superior technical capability.

**Mechanical Engineering Laboratories**

The mechanical engineering program maintains six physical experimental laboratories in Moser Hall. A wide array of modern equipment, instrumentation devices, and department-owned computers are housed in spacious rooms that support academic instruction and research activities in applied thermodynamics, heating and air conditioning, fluid mechanics, heat transfer, stress analysis, vibrations, and material property characterization. Other mechanical engineering laboratories are simulation and computing-related laboratories that include computer-aided design, machine design, kinematic and dynamic systems, and finite-element analysis. The College and the mechanical engineering program maintain modern computing facilities in Moser Hall and constantly upgrade hardware and software. The students and faculty also use the university computing facilities in Meskel Hall and Kilcawley Center.

For more information, visit Mechanical Engineering (http://www.ysu.edu/academics/science-technology-engineering-mathematics/mechanical-engineering-major/).

**Cooperative Education**

The mechanical engineering program strongly encourages its students to actively participate in the optional cooperative education program. The parallel co-op arrangement which combines work and study each semester is recommended. However, full time employment in the summer can also be included. Students must register for a co-op course and submit documentation as specified by professional practice office.

**Advisement**

The mechanical engineering program specifies mandatory advisement. Every student in the program is advised every semester before his or her registration. Students cannot finalize their registration without approval of the faculty advisor or chair.

**Industrial Advisory Board**

The Industrial Advisory Board is another valuable resource in ensuring a quality program. It is composed of members of various local industries, having a vital interest and purpose in the school and/or department. The industry advisory board members can also serve as mentors on an industry sponsored project, as well as to advise the department in the area of curriculum development and research. Our board members include:

David Drabison – Board Chair

Design Engineer
Babcock & Wilcox Company, Nuclear Operations Group
John Divitto
Business Development Manager
Babcock & Wilcox Company, Power Generation Group
Tony Ghioaldi
Vice President Sales
Quality Bridge & Fab, Inc.
Don Helle
Director – Global Process Engineering
The Goodyear Tire & Rubber Company
Patrick Kiraly
Tooling Specialist
V&M Star
Mike Malito
Babcock & Wilcox Company (Retired)
Anthony J Nackino
Engineering Manager
Advanced Recycling Systems, Inc.
Gorman Ng
Regional Manager
O.E.M. and Government
Linde Hydraulics Corporation
David Peterson
Babcock & Wilcox Company (Retired)
Courtney A. Puhl
Delphi Corporation
Richard Ulam
Business Development Manager
ABB Power Systems Power Generation
Douglas Verenski
President and Chief Engineer
Hunter Lift
SPA elective 3
SPA elective 3

### Mechanical Engineering Courses

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<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Semester Hours</th>
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<td>MECH 1560</td>
<td>Engineering Communication with CAD</td>
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<td>MECH 2603</td>
<td>Thermodynamics 1</td>
<td>3</td>
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<td>MECH 2604</td>
<td>Thermodynamics 2</td>
<td>3</td>
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<td>MECH 2606</td>
<td>Engineering Materials</td>
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<td>MECH 2641</td>
<td>Dynamics</td>
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<td>MECH 3708</td>
<td>Dynamic Systems Modeling</td>
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<td>MECH 3720</td>
<td>Fluid Dynamics</td>
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<td>MECH 3720L</td>
<td>Fluid Dynamics Laboratory</td>
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<td>MECH 3725</td>
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<td>MECH 3742</td>
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<td>MECH 3762</td>
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### Other Engineering Courses

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>ENGR 1500</td>
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<td>1</td>
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<tr>
<td>ENGR 1550</td>
<td>Engineering Concepts</td>
<td>2</td>
</tr>
<tr>
<td>ENGR 1560</td>
<td>Engineering Computing</td>
<td>2</td>
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<tr>
<td>CEEN 2601</td>
<td>Statics</td>
<td>3</td>
</tr>
<tr>
<td>CEEN 2602</td>
<td>Strength of Materials</td>
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<tr>
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<td>ECEN 2614</td>
<td>Basics of Electrical Engineering</td>
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### Mathematics courses

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<td>MATH 2673</td>
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<td>MATH 3705</td>
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### Chemistry and Physics courses

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<td>PHYS 2611</td>
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### Total Semester Hours

136-139

### Year 1

#### Fall

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<tr>
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<td>Calculus 1</td>
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<td>CHEM 1515</td>
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<td>ENGR 1500</td>
<td>Engineering Orientation</td>
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<td>ENGR 1550</td>
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### Semester Hours

18-19

#### Spring

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<td>CMST 1545</td>
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### Semester Hours

16

### Year 2

#### Fall

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<td>Engineering Communication with CAD</td>
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<td>MECH 2606</td>
<td>Engineering Materials</td>
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### Semester Hours

16

#### Spring

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<th>Title</th>
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<tbody>
<tr>
<td>MECH 2603</td>
<td>Thermodynamics 1</td>
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<td>MECH 2641</td>
<td>Dynamics</td>
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<tr>
<td>MATH 3705</td>
<td>Differential Equations</td>
<td>3</td>
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<tr>
<td>CEEN 2602</td>
<td>Strength of Materials</td>
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<td>ECEN 2614</td>
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### Semester Hours

16

### Year 3

#### Fall

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<tr>
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<tbody>
<tr>
<td>MECH 3720</td>
<td>Fluid Dynamics</td>
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<td>MECH 3751</td>
<td>Stress and Strain Analysis 1</td>
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<tr>
<td>MECH 3751L</td>
<td>Stress and Strain Analysis 1 Laboratory</td>
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<td>ISEN 3710</td>
<td>Engineering Statistics</td>
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<tr>
<td>ECON 2610</td>
<td>Principles 1: Microeconomics</td>
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### Semester Hours

16

#### Spring

<table>
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<th>Title</th>
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<tbody>
<tr>
<td>MECH 2604</td>
<td>Thermodynamics 2</td>
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<tr>
<td>MECH 3708</td>
<td>Dynamic Systems Modeling</td>
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<tr>
<td>MECH 3720L</td>
<td>Fluid Dynamics Laboratory</td>
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</tr>
<tr>
<td>MECH 3725</td>
<td>Heat Transfer 1</td>
<td>3</td>
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<tr>
<td>MECH 3762</td>
<td>Design of Machine Elements</td>
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### Semester Hours

15

### Year 4

#### Fall

<table>
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<td>Mechanical Systems Design 1</td>
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<td>Mechanical Systems Design Laboratory</td>
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<tr>
<td>MECH 4825L</td>
<td>Heat Transfer and Thermodynamics Laboratory</td>
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<tr>
<td>MECH 5881</td>
<td>Mechanical Vibrations</td>
<td>3</td>
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<tr>
<td>PHIL 2625</td>
<td>Introduction to Professional Ethics</td>
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<tr>
<td>MECH Elective</td>
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<tr>
<td>GER Elective (SS)</td>
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### Semester Hours

16

#### Spring

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>MECH 4809</td>
<td>Mechanical Systems Design 2</td>
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<td>MECH 5881L</td>
<td>Mechanical Vibrations Laboratory</td>
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### Semester Hours

16

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Bachelor of Engineering in Mechanical Engineering
MECH Elective 3
GER Elective (AH) 3
GER Elective (SPA) 3

<table>
<thead>
<tr>
<th>Semester Hours</th>
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### Mechanical Engineering Electives

<table>
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<th>COURSE</th>
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<tbody>
<tr>
<td>Heat &amp; Fluid Flow</td>
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<tr>
<td>MECH 4800</td>
<td>Special Topics</td>
<td>3</td>
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<tr>
<td>MECH 4823</td>
<td>Heating, Ventilation, and Air Conditioning</td>
<td>3</td>
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<tr>
<td>MECH 4835</td>
<td>Thermal Fluid Applications</td>
<td>3</td>
</tr>
<tr>
<td>MECH 5825</td>
<td>Heat Transfer 2</td>
<td>3</td>
</tr>
<tr>
<td>MECH 5836</td>
<td>Fluid Power and Control</td>
<td>3</td>
</tr>
<tr>
<td>MECH 5885</td>
<td>Computational Fluid Dynamics</td>
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| Solid Mechanics | | |
| MECH 4800 | Special Topics | 3 |
| MECH 5842 | Kinetics of Machines | 3 |
| MECH 5852 | Stress and Strain Analysis 2 | 3 |
| MECH 5884 | Finite Element Analysis | 3 |
| MECH 5892 | Control of Mechanical Systems | 3 |

### Student Outcomes

The YSU mechanical engineering program student outcomes ensure that our graduates have been given the skills to attain the program educational objectives after graduation. Student outcomes for direct assessment are ABET specified outcomes (1) through (7). Our students are expected to graduate with:

1. **Engineering Expertise** - an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics

2. **Design Expertise** - an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors

3. **Communication Skills** - an ability to communicate effectively with a range of audiences

4. **Professional Responsibility** - an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts

5. **Teamwork Competency** - an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives

6. **Experimental Competency** - an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions

7. **Life-long Learning** - an ability to acquire and apply new knowledge as needed, using appropriate learning strategies

### Minor in Industrial and Systems Engineering

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
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<tbody>
<tr>
<td>ISEN 3710</td>
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<tr>
<td>ISEN 3716</td>
<td>Systems Analysis and Design</td>
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<td>ISEN 3720</td>
<td>Statistical Quality Control</td>
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<tr>
<td>ISEN 3723</td>
<td>Manufacturing Processes</td>
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<tr>
<td>ISEN 3724</td>
<td>Engineering Economy</td>
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<tr>
<td>ISEN 3736</td>
<td>Methods Engineering</td>
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<td>ISEN 3736L</td>
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| Total Semester Hours | 18 |

### Minor in Mechanical Engineering

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<tr>
<td>MECH 2603</td>
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<td>MECH 2641</td>
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<tr>
<td>MECH 3720</td>
<td>Fluid Dynamics</td>
<td>3</td>
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<td>MECH 3742</td>
<td>Kinematics of Machines</td>
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<td>MECH 3751</td>
<td>Stress and Strain Analysis 1</td>
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| Total Semester Hours | 18 |

### Bachelor of Engineering in Manufacturing Engineering

The Bachelor of Engineering degree in Manufacturing Engineering provides students with expertise that focuses on the processes needed to produce physical goods and materials. Students will gain a strong foundation in materials, mechanical engineering, and design to support their understanding of the mechanics of processes. They will also gain foundational understanding of industrial engineering concepts to support their ability to optimize production systems for maximum efficiency. Topics will include traditional manufacturing as well as modern digital manufacturing (additive manufacturing / 3D printing) processes and automation. Graduates from this program will be well prepared for careers in a wide range of industries including: traditional manufacturers, primary materials producers, and high-tech manufacturing (including defense, aerospace, and biomedical).

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<tbody>
<tr>
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<tr>
<td>Fall</td>
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<tr>
<td>CHEM 1515</td>
<td>General Chemistry 1</td>
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<td>ENGL 1550</td>
<td>Writing 1</td>
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<tr>
<td>ENGR 1500</td>
<td>Engineering Orientation</td>
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<td>ENGR 1550</td>
<td>Engineering Concepts</td>
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<tr>
<td>CMST 1545</td>
<td>Communication Foundations</td>
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<td>ENGL 1551</td>
<td>Writing 2</td>
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<tr>
<td>MATH 1572</td>
<td>Calculus 2</td>
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<td>MECH 1560</td>
<td>Engineering Communication with CAD</td>
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<td>General Physics 1</td>
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| Semester Hours | 16 |
### Year 2

#### Fall
- **CEEN 2601** Statics 3
- **MATH 2673** Calculus 3 4
- **MECH 2606** Engineering Materials 3
- **PHYS 2611** General Physics 2 4
- **ISEN 3723** Manufacturing Processes 3
- **MFG 3723L** Manufacturing Processes Laboratory 1

| Semester Hours | 18 |

#### Spring
- **ECEN 2614** Basics of Electrical Engineering 3
- **ISEN 3716** Systems Analysis and Design 3
- **MATH 3705** Differential Equations 3
- **MECH 2603** Thermodynamics 1 3
- **MECH 2641** Dynamics 3

| Semester Hours | 15 |

### Year 3

#### Fall
- **MFG 3771** Additive and Digital Manufacturing 3
- **ISEN 3724** Engineering Economy 3
- **ISEN 3710** Engineering Statistics 3
- **MECH 3720** Fluid Dynamics 3
- **MECH 3762** Design of Machine Elements 3
- **MECH 3762L** Design of Machine Elements Laboratory 1

| Semester Hours | 16 |

#### Spring
- **ISEN 3720** Statistical Quality Control 3
- **GER Elective (SPA)** 2
- **GER Elective (SS)** 3
- **GER Elective (SS)** 3

| Semester Hours | 11 |

### Year 4

#### Fall
- **GER Elective (AH)** 3
- **PHIL 2625** Introduction to Professional Ethics 3
- **MFG 4823** Manufacturing Processes 2 3
- **MFG 4823L** Manufacturing Processes 2 Laboratory 1
- **MFG 4871** Stress Plasticity and Deformation with FEA for Manufacturing 3
- **MFG 4861** Design for Manufacturability 3

| Semester Hours | 16 |

#### Spring
- **GER Elective (AH)** 3
- **ISEN 5823** Automation 3
- **MECH 5836** Fluid Power and Control 3
- **ENT 3700** Entrepreneurship New Venture Creation 3
- **MFG 4821** Manufacturing Capstone 3
- **MFG Technical Elective (select from list)** 3

| Semester Hours | 15 |

| Total Semester Hours | 124 |

### Learning Outcomes

The goal of the B.E. in Manufacturing Engineering degree program at YSU is to provide our graduates with strong foundation of theoretical and applied skills equipping them for success in pursuing careers in manufacturing or to continue on to advanced study in related fields.

The learning objective for the major in Manufacturing Engineering include:

1. Students will demonstrate an understanding of the fundamentals of manufacturing engineering, including significant elements from Mechanical Engineering, Industrial Engineering, and manufacturing process design and analysis.
2. Students will demonstrate independent and critical thinking.
3. Students will demonstrate competency in the use of modern engineering computational tools, including solid modeling and finite element analysis software.
4. Students will be able to acquire and interpret experimental data using appropriate instrumentation, sensing, data acquisition, and computational tools.
5. Students will demonstrate the ability to effectively communicate information orally and in writing.

### The Warren P. Williamson, Jr. College of Business Administration

**Betty Jo Licata, Dean**

### Accreditation

The Williamson College of Business Administration’s associate, bachelor’s, and master’s programs are accredited by AACSB International - The Association to Advance Collegiate Schools of Business (http://www.aacsb.edu/accreditation/), the premier accrediting agency for programs in business administration. Fewer than 5% of business schools worldwide have earned AACSB accreditation.

### Mission Statement

“Excellence through Engagement”

The mission of the WCBA is to develop successful professionals and leaders for business and society.

We emphasize:

- A student-centered, teaching/learning process that focuses on the application of theory to practice and supports the intellectual and professional development of our students.
- Faculty scholarship that contributes to management practice, advances the discipline, and enhances the teaching-learning process.
- Contributions by our students, faculty, and staff that support the university, profession, and the economic development of the region.

### BSBA Learning Outcomes

Williamson College of Business Administration graduates will be:

#### Knowledgeable Business Professionals

1. Students will demonstrate a multidisciplinary understanding of business concepts.

#### Adept Business Problem Solvers

1. Students will be able to utilize appropriate techniques to identify a business problem.
2. Students will be able to conduct analysis using evidence based methods.
3. Students will be able to make a supported recommendation intended to solve a business problem.

#### Professional Communicators
1. Students will be able to deliver professional business presentations.
2. Students will be able to write professional business documents.

**Model Business Professionals**

1. Students will exhibit professional conduct in a workplace environment.
2. Students will exhibit behaviors associated with being an effective team member.
3. Students will exhibit behaviors associated with being an effective leader.

**Bachelor of Science in Business Administration Majors**
The Williamson College of Business Administration offers courses leading to the Bachelor of Science in Business Administration (BSBA) degree, with majors in:

- Accounting ([link](http://catalog.ysu.edu/undergraduate/colleges-programs/college-business-administration/school-accounting-finance(bsba-in-accounting)))
- Advertising and Public Relations ([link](http://catalog.ysu.edu/undergraduate/colleges-programs/college-business-administration/department-marketing/advertising-public-relations))
- Business Administration ([link](http://catalog.ysu.edu/undergraduate/colleges-programs/college-business-administration/department-management/business-administration))
- Business Economics ([link](http://catalog.ysu.edu/undergraduate/colleges-programs/college-business-administration/business-economics))
- Finance: Certified Financial Planner Track ([link](http://catalog.ysu.edu/undergraduate/colleges-programs/college-business-administration/school-accounting-finance(bsba-finance-certified-financial-planning-track)))
- International Business (ICP) ([link](http://catalog.ysu.edu/undergraduate/colleges-programs/college-business-administration/international-business))
- Management ([link](http://catalog.ysu.edu/undergraduate/colleges-programs/college-business-administration/department-management/management))
- Marketing: Marketing Management Track ([link](http://catalog.ysu.edu/undergraduate/colleges-programs/college-business-administration/school-accounting-finance(bsba-icp)))
- Marketing: Sales Management Track ([link](http://catalog.ysu.edu/undergraduate/colleges-programs/college-business-administration/department-marketing/marketing-sales-management-track))

**wcba certificate program**

- Entrepreneurship ([link](http://catalog.ysu.edu/undergraduate/colleges-programs/college-business-administration/department-management/leadership-certificate))
- Nonprofit Leadership ([link](http://catalog.ysu.edu/undergraduate/colleges-programs/college-business-administration/department-management/nonprofit-leadership))

**Associate Degrees**

- Associate in Arts in Business Administration ([link](http://catalog.ysu.edu/undergraduate/colleges-programs/college-business-administration/wcba-associate-degrees(aa-business-administration)))
- Associate in Technical Study ([link](http://catalog.ysu.edu/undergraduate/colleges-programs/college-business-administration/wcba-associate-degrees(ats-business-technology)))

**Graduate Degrees**

- Master of Business Administration (MBA) ([link](http://www.ysu.edu/academics/williamson-college-business-administration/business-administration-mba))
- Master of Accountancy (MAcc) ([link](http://www.ysu.edu/academics/williamson-college-business-administration/master-accountancy))

For more information, visit The Warren P. Williamson, Jr. College of Business Administration ([link](http://www.ysu.edu/academics/williamson-college-business-administration/)).

**Facilities**
The Williamson College of Business Administration moved into a new 110,000 square-foot, $34.3 million building in fall 2010. The College’s new home is a LEED-certified state-of-the-art facility that provides enhanced classrooms and learning spaces for students and provides a variety of places for students to study and meet with team members, friends, and the business community. The building includes:

- WCBA Student Services Center ([link](http://www.ysu.edu/academics/williamson-college-business-administration/advisement))
- Center for Career Management ([link](http://www.ysu.edu/academics/williamson-college-business-administration/internships))
- Faculty Offices
- 3D Printing Lab
- Professional Sales and Business Communication Lab
- Financial Services Lab
- Gallery of Industry, Business and Entrepreneurship
- 14 Classrooms
- Team Rooms
- Conference Center and Executive Board Room
- 200-seat Auditorium
• Ohio Small Business Development Center, Williamson Center for International Business, Center for Nonprofit Leadership and the Center for Entrepreneurship

Designed to link the campus with the downtown community, the building is a valuable resource for WCBA students and the regional community.

Bachelor's Degree Program-BSBA
Declaring a Major

Direct Admission

Incoming first year business students with a minimum 3.0 high school GPA OR minimum ACT score of 21 or SAT score of 1060 will be admitted directly into the business major of their choice (Accounting, Advertising/Public Relations, Business Administration, Business Economics, Finance, Human Resource Management, International Business (ICP), Management, Marketing).

Pre-Business Administration

Incoming first year students who do not meet the standards established above (3.0 high school GPA OR 21 ACT or 1060 SAT) will be admitted as Pre-Business Administration. Pre-Business Administration majors will be eligible to declare a major after successful completion of all of the following:
• 29 semester hours
• 2.5 overall YSU GPA
• Successful completion of ENGL 1550 Writing I and MATH 1510 College Algebra

General Education and Business Tool Courses

<table>
<thead>
<tr>
<th>COURSE</th>
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</table>

Transfer Students/Change of Major

Transfer students and YSU students requesting a change of major to business will be admitted directly to their major of choice if they have successfully completed ENGL 1550 Writing I (C), MATH 1510 College Algebra, all developmental course work, and have a minimum 2.5 overall GPA.
BUSINESS TOOL COURSES

Business Tool courses must be completed with the grade of a "C" or higher and CANNOT be taken credit/no credit.

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 1500</td>
<td>Exploring Business</td>
<td>3</td>
</tr>
<tr>
<td>BUS 2600</td>
<td>Business Applications of Microsoft Excel</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1552</td>
<td>Applied Mathematics for Management</td>
<td>4</td>
</tr>
<tr>
<td>ECON 2610</td>
<td>Principles 1: Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 2630</td>
<td>Principles 2: Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>MGT 2604</td>
<td>Legal Environment of Business 1</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 2602</td>
<td>Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 2603</td>
<td>Managerial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 3742</td>
<td>Business Writing</td>
<td>3</td>
</tr>
<tr>
<td>ECON 3788</td>
<td>Statistics for Business and Economics 1</td>
<td>3</td>
</tr>
</tbody>
</table>

Additional General Education courses are necessary for degree.

Business Core

COURSE TITILE S.H.

Upper Level Business courses required for all BSBA degrees. To enroll in Business Core courses students MUST:

- Successfully complete ENGL 1550, ENGL 1551, PHIL 2628, CMST 1545, all Business Tool courses.
- Have a minimum 2.5 overall GPA.
- Business Core courses must be completed with the grade of a "C" or higher and cannot be taken credit/no credit.

COURSE TITILE S.H.

To graduate, students must complete the following courses required for all BSBA degrees. Students pursuing the BSBA degree must have a minimum overall GPA of 2.5.

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
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<tbody>
<tr>
<td>BUS 3700</td>
<td>Business Analytics</td>
<td>3</td>
</tr>
<tr>
<td>BUS 3715</td>
<td>Principles of International Business</td>
<td>3</td>
</tr>
<tr>
<td>FIN 3720</td>
<td>Business Finance</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 3702</td>
<td>Business Professionalism</td>
<td>1</td>
</tr>
<tr>
<td>MKTG 3703</td>
<td>Marketing Concepts and Practice</td>
<td>3</td>
</tr>
<tr>
<td>MGT 3725</td>
<td>Fundamentals of Management</td>
<td>3</td>
</tr>
<tr>
<td>MGT 3761</td>
<td>Management Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>MGT 3789</td>
<td>Operations Management</td>
<td>3</td>
</tr>
<tr>
<td>MGT 4850</td>
<td>Strategic Management and Leadership Graduating</td>
<td>3</td>
</tr>
</tbody>
</table>

Students pursing the BSBA degree must have a minimum overall GPA of 2.5.

A graduation evaluation request must be submitted no later than two semesters prior to a student’s intended graduation. It is a student’s responsibility to request the evaluation through the student portal system.

The Request for Graduation Evaluation can be submitted via the MyYSU Portal by clicking on "Access My Student Information" then "Graduation Evaluation Request".

ROTC students are permitted specific modifications of the requirements as explained in the Academic Policies and Procedures section.

Professional Development

Business majors are encouraged to develop a strong portfolio of knowledge, skills, and experiences that position them for success in college and in their careers. A wide array of opportunities are available which enable students to gain career related experience, develop leadership skills, and acquire professional competencies.

Internships/Co-Operative Education

WCBA students gain career-related work experience through internships and cooperative education experiences. These experiences provide students with professional level experience related to their chosen major. In addition to gaining valuable experience, students can earn academic credit for up to two different internships. Internships for which students earn academic credit must be paid. Internships can be part-time or full-time, either fall, spring, or summer, and can be located anywhere in the world. The WCBA Center for Career Management offers assistance to both students and employers interested in participating in the Internship and Cooperative Education Program. Internships are offered in accounting, advertising/public relations, finance, management (management, supply chain management and information systems), marketing, sales, international trade, entrepreneurship, and nonprofit leadership.

Student Leadership Opportunities

Student chapters of national professional organizations provide an excellent means for students to develop leadership skills, network with professionals in their chosen career fields, and increase their exposure to the business world.

Professional student organizations in the Williamson College of Business Administration include:

- Advertising Club
- American Marketing Association Collegiate Chapter
- Beta Alpha Psi
- Beta Gamma Sigma
- Enactus
- Institute of Management Accountants

Major Requirements

Major requirements differ based upon the student’s field of study. They will consist of 30-42 credit hours of upper level business courses including specific courses related to the major, major related electives and business electives. An upper division business course is a 3000-level or higher course from the following subjects: BUS, ADV, ACCT, FIN, ENT, MGT, and MKTG. Students can use up to six credit hours of ECON upper level courses as business electives (with the exception of Business Economics majors, who will have additional ECON required courses). Upper level business courses must be successfully completed with the grade of a "C" or higher and cannot be take credit/no credit.

BSBA Graduation Requirements

The student has the responsibility for making sure that all graduation requirements for the degree are satisfied. For the Bachelor of Science in Business Administration, the requirements include:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>ENGL 1551</td>
<td>Writing 2</td>
<td></td>
</tr>
<tr>
<td>PHIL 2628</td>
<td>Business Ethics</td>
<td></td>
</tr>
<tr>
<td>CMST 1545</td>
<td>Communication Foundations</td>
<td></td>
</tr>
</tbody>
</table>

A minimum of 120 semester hours
- Completion of all General Education and BSBA requirements
- The grade of a C or higher in ENGL 1551, MATH 1552, Business Tool courses, Business Core Courses and Major Courses. These courses cannot be taken credit/no credit
- Minimum cumulative GPA of 2.5
- Course-level requirements (completion of sixty (60) semester hours of courses must be completed at the 2000 level or higher, of which forty-eight (48) semester hours must be at the 3000 level or higher
- At least 50 percent (62 hours) of the total degree requirements must be taken in non-business courses. Up to nine hours of economics courses can be counted as non-business
- Residency requirement (http://catalog.ysu.edu/undergraduate/general-information/academic-policies-procedures/graduation-requirements/)
- Application for graduation (https://ysu.edu/penguin-service-center/apply-for-graduation/)

A graduation evaluation request must be submitted no later than two semesters prior to a student’s intended graduation. It is a student’s responsibility to request the evaluation through the student portal system.

The Request for Graduation Evaluation can be submitted via the MyYSU Portal by clicking on "Access My Student Information" then "Graduation Evaluation Request".

ROTC students are permitted specific modifications of the requirements as explained in the Academic Policies and Procedures section.
— International Business Organization
— Management Information Systems Association
— Pi Sigma Epsilon (PSE) - Professional Sales Organization
— Society for Human Resource Management (SHRM)
— Student Investment Fund Organization
— Student Leadership Council
— Student Nonprofit Leadership Organization

Professional Development Programs

The Williamson College of Business Administration offers extensive programming to ensure students are career-ready upon graduation. Programs such as Accounting & Finance Student Practitioner Day, VITA Tax Program, Professional Development Summit, Shadow Days, and Meet the Employers Day are designed to assist students in building their professional network, expanding their knowledge of the business world and developing skills to advance their readiness for full-time professional employment. WCBA academic advisors and the Center for Career Management staff are available to help students with academic planning, interview skills, resume writing, and internship/job search strategies.

Honor Societies

The Williamson College of Business Administration recognizes students’ outstanding academic performance through initiation into Beta Gamma Sigma, the national honor society for AACSB International-accredited business schools. Students who qualify for Beta Gamma Sigma are inducted in the spring of each year. To be eligible, students must be in the upper 10 percent of the junior class, the upper 10 percent of the senior class, or the upper 20 percent of the graduating master’s class.

Qualified business students are also eligible for membership in Phi Kappa Phi, a national honor society that recognizes superior scholarship in all academic fields, and Beta Alpha Psi, the national professional organization for accounting, finance, and information systems majors who have completed one upper level course, have a 3.0 accounting, finance, or information systems GPA, and have a 3.0 overall GPA.

WCBA Business Leaders

The Williamson College of Business Administration Business Leaders Program is designed for students who excel academically and demonstrate a high level of commitment to their professional and leadership development. This program provides a select group of incoming freshmen with a variety of opportunities to increase their knowledge of business, accelerate their involvement with the business community, and enhance their professional preparation. To be eligible for the Business Leaders Program, students must have:

- 3.5 high school grade point average
- ACT Score of at least 25 or SAT score of at least 1150

Global Learning Experiences

Students who participate in a global learning experience cultivate an international mindset that allows them to identify opportunities across a broad spectrum of different countries and economies. A global mindset cannot be taught—it comes with experience. YSU and the WCBA offers several programs to prepare students for entry into the world-wide business environment including:

- Short-term global learning experiences lasting approximately 10 days typically offered during a class break period (winter, spring, or summer break). These are faculty-led tours that include business and cultural visits to places including Italy and Ireland. Students receive three credit hours of upper-level business coursework that is applied to their degree requirements.

- Study Abroad Programs offered through the YSU Center for International Studies and Programs offer a variety of semester-long international study experiences. These programs allow students to live in and take classes at an international university. WCBA students have spent a semester abroad studying in Italy, Australia, China, and Spain.

Lariccia School of Accounting and Finance

OVERVIEW

Welcome to the Lariccia School of Accounting & Finance! Students interested in the quantitative aspects of business and commerce will find both our curricular and extracurricular offerings desirable for their education and career pursuits. Please explore the resources here to learn more about the breadth of offerings now housed within our School.

Jeremy Schwartz, Acting Director
(330) 941-3076
jtschwartz@ysu.edu

DISCIPLINES

Accounting majors are taught how to gather, analyze, record, prepare, and examine a variety of financial information with this information being of central importance to CEOs, business owners, and policy makers. Accounting graduates pursue careers in general accounting, tax, audit, consulting, government accounting, or nonprofit accounting. Professional accounting certifications include Certified Public Accounting (CPA), Certified Management Accounting (CMA), Certified Fraud Examiner (CFE), and Certified Internal Auditor (CIA).

Finance majors use financial information to analyze a company’s future prospects and manage a company’s working capital, to analyze markets and make investment decisions, to assist individuals in planning their financial future, or to analyze the benefits and risks of company decisions. Graduates with a major in finance pursue careers in areas such as financial analysis, treasury, financial services including banking and insurance, risk management, or financial planning. Professional certifications include Certified Financial Planner (CFP), Chartered Financial Analyst (CFA), and Certified Valuation Analyst (CVA).

Economics majors master valuable knowledge and develop real-world skills along with a sense of enlightenment and fulfillment. Economics majors are a good fit for career choices like market research analyst, financial planner/adviser, economic consultant, risk analyst, political scientist, policy analyst, actuary, etc. After graduation, some of our majors choose to go to law schools or pursue a doctorate degree in economics or finance.

EXTRACURRICULAR ACTIVITIES

- Student-Practitioner Days
- Volunteer Income Tax Assistance Program
- Student Investment Club
- Institute of Management Accountants
- Economics Club

HONORARY FRATERNITIES

- Beta Alpha Psi (Accounting)
- Omicron Delta Epsilon (Economics)
Lariccia School of Accounting and Finance

Overview
Welcome to the programs in Accounting & Finance! Please explore the resources here to learn more about the breadth of offerings now housed within our School.

Jeremy Schwartz, Acting Director
(330) 941-3076
jtschwartz@ysu.edu

ACCOUNTING
Are you good with numbers? Does your mind like order? Can you put pieces of information together in an organized way?

Accounting is often called the language of business because knowledge of this discipline is essential for understanding the financial statements used by all entities. Classification is the key concept and its mastery is the hallmark of a successful accounting major. Our students experience practice in this process throughout our curriculum as well as in internship opportunities throughout their academic careers.

FINANCE
Do you think about how to make more profits? Can you quantify and evaluate alternatives? Do you understand the connections between the financial statements?

Finance makes use of accounting in a variety of decision making contexts. The breadth of study in finance allows students to pursue mastery in two different tracks: Financial Management and Certified Financial Planner (CFP). While both tracks develop students’ expertise in quantitative analysis, they differ in their primary career arcs. Those studying financial management are more likely aligned with working with financial institutions and firms to help the entity become more profitable or to use its resources more profitably. Those pursuing the CFP designation are more likely to assist individuals with their long-term financial needs (e.g., retirement savings, investments, life insurance, and long-term care insurance).

Professor
Huaiyu (Peter) Chen, Ph.D., Associate Professor
Marsha M. Huber, Ph.D., Professor
Maria Paulina Kassawat, Ph.D., Assistant Professor
David B. Law, Ph.D., Professor
Karin A. Petruska, Ph.D., Professor
Jeremy T. Schwartz, Ph.D., Associate Professor, Acting Director
Raymond J. Shaffer, D.B.A., Assistant Professor
Peter Woodlock, Ph.D., Professor
Xiaolou Yang, Ph.D., Associate Professor
Yiyang Zhang, Ph.D., Assistant Professor

Lecturer
Kerri Henderson, M.B.A., Lecturer
Michael Villano, Ph.D., Lecturer
Jessie Wright, M.B.A., Lecturer

Youngstown State University Undergraduate 547

 Majors

• BSBA in Accounting (p. 551)
• BSBA in Finance, Financial Management Track (p. 555)
• BSBA in Finance, Certified Financial Planner Track (p. 553)

 Minors

• Accounting Minor (p. 556)
• Finance Minor (p. 557)

Accounting

ACCT 1503  Elementary Accounting  3 s.h.
Terminology, concepts and principles of basic financial and managerial accounting from a user perspective. Internal controls, cash controls, and payroll accounting are covered. Does not fulfill WCBA requirements and cannot substitute for ACCT 2602.

ACCT 2600  Accounting Field Experience  1 s.h.
Internship and/or cooperative education experiences in accounting. Students may be assigned to corporate, non-profit, or government entities on a semester basis. Can repeat this course once for a different field experience.
Prereq.: 2.5 GPA, department approval and sophomore standing.

ACCT 2602  Financial Accounting  3 s.h.
Study of the accounting cycle and generally accepted accounting principles including preparation of financial statements.
Prereq.: Sophomore standing or "C" or better in BUS 1500 and "C" or better in MATH 1507 or level 40 on math placement test or 22 or higher ACT Math Score or 550 or higher SAT Math Score.

ACCT 2602H  Honors Financial Accounting  3 s.h.
Study of the accounting cycle and generally accepted accounting principles including preparation of financial statements.
Prereq.: Sophomore standing or "C" or better in BUS 1500 and "C" or better in MATH 1507 or level 40 on math placement test or 22 or higher ACT Math Score or 550 or higher SAT Math Score.

ACCT 2603  Managerial Accounting  3 s.h.
Study of the accounting informational needs of management. Emphasis on techniques of planning and control.
Prereq.: "C" or better in ACCT 2602.

ACCT 3701  Intermediate Accounting  1  4 s.h.
Comprehensive study of the theories and concepts underlying financial accounting. Emphasis on income determination, asset valuation, measurement of liabilities and changes in financial position.
Prereq.: "C" or better in ACCT 2603 and ACCT 2603L or ACCT 2603 and BUS 2600, 2.5 overall GPA.

ACCT 3702  Intermediate Accounting  2  4 s.h.
Comprehensive study of the theories and concepts underlying financial accounting. Emphasis on income determination, asset valuation, measurement of liabilities and changes in financial position.
Prereq.: "C" or better in ACCT 3701 and 2.5 overall GPA.

ACCT 3709  Accounting Information Systems  4 s.h.
Study of systems analysis, design, and implementation within the context of an accounting information system. Topics include a treatment of the business computing environment, security and control of information, the accounting information system as a component of the management information system, and decision support and expert systems.
Prereq.: "C" or better in ACCT 3701 and 2.5 overall GPA.

ACCT 3710  Analysis and Design of Accounting Databases  3 s.h.
An introduction to the analysis of accounting databases. Specific emphasis is placed on the structure and use of accounting databases, particularly XBRL.
Prereq.: ACCT 3709.
ACCT 3711  Cost Accounting  3 s.h.
Study of cost accumulation for products manufactured under job order or continuous manufacturing processes; cost behavior and profit-volume relationships; cost structures for control and motivation; relevant costs for non-routine decision making. Prereq.: "C" or better in ACCT 2603 and ACCT 2603L or ACCT 2603 and BUS 2600 and 2.5 overall GPA.

ACCT 3712  Advanced Cost  3 s.h.
In-depth study of standard and differential costing. Compilation and preparation of budget data for managerial and administrative purpose. 2.5 overall GPA. Prereq.: "C" or better in ACCT 3711.

ACCT 3721  State and Local Taxes  3 s.h.
Theory applicable to state and local taxation. Primary emphasis on taxation principles in current use by state and local government units located throughout the United States. Case law is studied, some representative tax returns prepared. 2.5 overall GPA. Prereq.: "C" or better in ACCT 2603.

ACCT 3730  Oil and Gas Accounting  3 s.h.
Accounting and taxation principles and procedures for the petroleum industry. Topics include exploration, leasing, drilling and production problems. 2.5 overall GPA. Prereq.: "C" or better in ACCT 2603.

ACCT 3750  Fraud Examination  3 s.h.
Study of occupational fraud and abuse. Topics include asset misappropriation schemes, corruption, and fraudulent statements, including fraudulent financial statements. Coverage of these topics includes implications for the fraud examiner and corporate management. 2.5 overall GPA. Prereq.: "C" or better in ACCT 2602.

ACCT 4801  Advanced Accounting  4 s.h.
Financial accounting and reporting related to complex and highly sophisticated business transactions. Topics include the equity method, business combinations, variable interest entities, segment and interim reporting, worldwide diversity of accounting standards, foreign currency transactions and translation, SEC reporting, legal reorganizations and liquidations, partnership accounting, and estates and trusts. 2.5 overall GPA. Prereq.: "C" or better in ACCT 3702 and FIN 3720.

ACCT 4808  Auditing and Fraud Investigation  4 s.h.
The theory and practice of financial auditing with emphasis on fraud investigation. Topics include professional standards, audit reports, evidence, occupational fraud, data interrogation, and computer-assisted audit techniques. Students analyze actual business fraud cases. "C" or better in FIN 3720. 2.5 overall GPA. Prereq.: "C" or better in ACCT 3702, ACCT 3709, and ACCT 3711.

ACCT 4809  Security and Privacy in Electronic Commerce  3 s.h.
This course focuses on the technology and communication infrastructure supporting electronic commerce and its impact on auditing. Encryption, public key infrastructure, digital signatures, payment schemes, and web commerce are discussed. 2.5 overall GPA. Prereq.: ACCT 4808.

ACCT 4813  Federal Taxation 1  4 s.h.
Introduction to Federal taxation theory and concepts relating to individuals and business entities, including tax research and tax form preparation. 2.5 overall GPA. Prereq.: "C" or better in ACCT 3701, or FIN 3720.

ACCT 4815  Estate Planning  3 s.h.
A study of estate and gift tax law including tax return preparation. Emphasis on the importance of estate planning and the devices available for use in such planning, and effective uses of lifetime gifts, trusts, life insurance, pension plans, profit sharing, and other fringe benefit plans. The effects of state inheritance tax and property laws upon estate planning will be included. 2.5 overall GPA. Prereq.: "C" or better in ACCT 4813.

ACCT 4817  Income Tax Preparation 1  3 s.h.
Preparation of actual federal, state and local income tax returns of people from the community. Completion of an IRS training program in federal income taxation of individuals, including international students and scholars and military personnel. Training using professional income tax preparation software is also provided. 2.5 overall GPA. Prereq.: ACCT 3701 or permission of instructor.

ACCT 4818  Income Tax Preparation 2  3 s.h.
A continuation of ACCT 4817 with updated training in federal tax law and tax preparation software. Because of previous experience in ACCT 4817, students prepare more-complex tax returns (including small business and rental returns), provide guidance and leadership to first-year students, and assist with summary and efilng of tax returns. A more in-depth summary/reflection paper is required. May be repeated once. 2.5 overall GPA. Prereq.: ACCT 4817.

ACCT 4835  Research in Accounting and Taxation  3 s.h.
This course provides useful guidance and information in conducting practical professional tax and accounting research. A broad range of case analyses allows the instructor to focus on appropriate current topics in the accounting profession. Three hours lecture and hands-on research per week. 2.5 overall GPA. Prereq.: "C" or better in ACCT 3702 and ACCT 4813.

ACCT 4840  Accounting Internship  3 s.h.
The student is given the opportunity to relate theory to practice in a career related on-site field experience with a participating organization. Prereq.: Accounting major, junior standing, 2.5 overall GPA, and approval of director.

ACCT 4841  Accounting Internship 2  3 s.h.
Students have the opportunity to relate theory to practice in a career related on-site field experience with a participating organization. Accounting Internship 2 may be done at a different or the same organization as ACCT 4840; if the same organization, higher levels of duties and performance are expected. 2.5 overall GPA, and approval of director. Prereq.: "B" or better in ACCT 4840.

ACCT 4851  Professional Practice in Accounting  1 s.h.
Provides students with cooperative education experiences in accounting. Students may be assigned to public, corporate, or government entities on a semester to semester basis. May be repeated. 2.5 overall GPA. Prereq.: Accounting major, junior standing.

ACCT 4855  Careers and Professionalism in Acct  1 s.h.
Professionals from public, private, nonprofit and governmental accounting areas are invited to speak during class. The focus is how to plan for, and what to expect when starting an accounting career, and how to conduct oneself as a professional. Ethical considerations are emphasized. The class offers a unique opportunity to interact and network with accounting professionals. Prereq.: Junior standing or permission of instructor, and 2.5 overall GPA.

ACCT 4860  Special Topics in Accounting  1-4 s.h.
Subject matter, credit hours, and prerequisites will be announced in advance of each topic. 2.5 overall GPA. Prereq.: Permission of department chairperson.

ACCT 4860U  Special Topics in Accounting Creative Problem Solving  1-4 s.h.
Subject matter, credit hours, and prerequisites will be announced in advance of each topic. 2.5 overall GPA. Prereq.: Permission of department chairperson.

ACCT 4870  CPA Review Financial Accounting and Reporting  2 s.h.
A CPA review course focused on preparing students to take the financial accounting and regulation sections of the CPA exam. Only ONE 2 semester hour CPA Review course may be used as an Upper Division Business elective towards the BSBA degree; cannot be used as an Accounting elective. Prereq.: "C" or better in ACCT 4801 and 2.5 overall GPA.
ACCT 4871 CPA Review Regulation 2 s.h.
A CPA review course focused on preparing students to take the regulation section of the CPA exam, including familiarizing students with the computer based questions and simulations found on the exam. Only ONE 2 semester hour CPA Review course may be used as an Upper Division Business elective toward the BSBA degree; cannot be used as an Accounting elective.
Prereq.: "C" or better in ACCT 4813, 2.5 overall GPA.

ACCT 4872 CPA Review AUDIT 2 s.h.
A CPA review course focused on preparing students to take the Auditing and Attestation section of the CPA exam. Only ONE 2 semester hour CPA Review course may be used as an Upper Division Business elective towards the BSBA degree; cannot be used as an Accounting elective.
Prereq.: "C" or better in ACCT 4808, 2.5 overall GPA.

ACCT 4873 CPA Review Business Environment and Concepts 2 s.h.
A CPA review course focused on preparing students to take the Business Environment and Concepts sections of the CPA exam. Only ONE 2 semester hour CPA Review course may be used as an Upper Division Business elective towards the BSBA degree; cannot be used as an Accounting elective.
Prereq.: "C" or better in ACCT 4813.

ACCT 5820 Government and Funds Accounting 3 s.h.
Generally accepted accounting principles for not-for-profit and governmental organizations as established by the appropriately recognized, standard-setting bodies. Includes state and local governments, school districts, colleges and universities, hospitals, voluntary health and welfare organizations, and others.
Prereq.: "C" or better in ACCT 3709, 3711 and FIN 3720 and 2.5 overall GPA.

ACCT 5814 Federal Taxation 2 3 s.h.
Study of federal income tax law applying to proprietorships, corporations, S corporations, and partnerships. Includes fundamentals of researching tax law and preparing business tax returns. 2.5 overall GPA.
Prereq.: "C" or better in ACCT 4813.

ACCT 6905 Business Tax Planning and Research 1 3 s.h.
A study of the tax planning process and how it relates to employee and employer matters including, but not limited to, the alternative minimum tax, personal holding companies, unreasonable accumulations of earnings, depreciation recapture, retirement structuring, tax credits, taxation of international persons, and estate tax issues, including both lifetime and testamentary transfers. Paper and electronic research media will be utilized along with various formats for presentation of results.
Prereq.: ACCT 5814 or equivalent.

ACCT 6908 Auditing Theory and Practice 3 s.h.
A study of auditing standards and procedures, use of statistical and other quantitative techniques, and auditing electronic data processing installations. Other topics include practice before the Securities and Exchange Commission, special reporting problems, current developments in auditing, professional ethics and responsibilities, and extensions of the attest function.
Prereq.: ACCT 4808 Auditing or equivalent.

ACCT 6909 Management Information and Control Systems 3 s.h.
A study of the formalized set of interrelated methods, procedures, and equipment utilized in developing, processing, storing, and reporting business financial and statistical information. The major emphasis is on computerized systems, although some attention is also given to manual operations and/or subsystems.
Prereq.: MGT 6900 and FIN 6900 or equivalent.

ACCT 6910 Business Internship 1-3 s.h.
Provides graduate students the opportunity to relate theory to practice through on-the-job work experience with a participating organization. The internship will serve as an elective MBA course.
Prereq.: Completion of level I MBA coursework and six semester hours of level II MBA coursework.

ACCT 6912 Advanced Management and Cost Accounting 3 s.h.
An examination of the managerial uses of accounting information for planning and control, and an investigation of cost accounting theory and practice.
Prereq.: ACCT 3711 Cost Accounting or equivalent.

ACCT 6915 Estate Planning 3 s.h.
A study of estate and gift tax law including tax return preparation. Emphasis on the importance of estate planning and the devices available for use in such planning, and effective uses of lifetime gifts, trusts, life insurance, pension plans, profit sharing, and other fringe benefit plans. The effects of state inheritance tax and property laws upon estate planning will be included.
Prereq.: "C" or better in ACCT 4813 or equivalent.

ACCT 6917 MAcc Income Tax Preparation 3 s.h.
Students prepare basic and complex tax returns (including small business and rental returns) for taxpayers from the university and community, provide guidance to undergraduate students, and assist in training and administration of the VITA (Volunteer Income Tax Preparation) program, including filing returns.
Prereq.: graduate standing.

ACCT 6922 Cost Based Decision Making 3 s.h.
Insights into a company’s product costs (including those considered direct and indirect), its fixed and variable costs (and ways to identify these) and an understanding of its controllable and non-controllable costs all are necessary to effectively manage an organization. This course focuses on these concepts and how they can be used when making business decisions.

ACCT 6925 Oil and Gas Accounting 3 s.h.
A study of the accounting and taxation principles and procedures of the petroleum industry. Topics include exploration, leasing, drilling and production problems.
Prereq.: "C" or better in ACCT 2603 or FIN 6902.

ACCT 6930 Financial Accounting Regulation 3 s.h.
The major objective of the course is to enable students to understand both the theoretical and practical aspects of compliance and regulation. Emphasis is on financial statement regulation and standard setting, including differences in financial measurement and reporting practices that exist in the U.S. and internationally. The course will examine how effective governance systems are implemented within all forms of organizations.
Prereq.: Graduate standing.

ACCT 6935 Research Accounting and Tax 3 s.h.
A study of the practical research process, providing useful guidance and information in conducting professional accounting and tax research. A broad range of case analyses allows a focus on current topics in the accounting profession.
Prereq.: "C" or better in ACCT 3702 and ACCT 4813.

ACCT 6945 Accounting Ethics and Professionalism 2 s.h.
This course will include coverage of professional ethics in accounting, practice development in accounting (including services marketing), and accounting-related career success skills. The course will be a combination of personal reflection, cases, lectures, outside guests (from accounting firms and entities and those that hire them), and a project identifying a development challenge faced by accountants with recommendations on what should be done.
Prereq.: Graduate Standing.

ACCT 6950 Fraud Examination 3 s.h.
A study of occupational fraud and abuse. Topics include asset misappropriation schemes, corruption, and fraudulent statements, including fraudulent financial statements. Coverage includes implications for the fraud examiner and corporate management.
Prereq.: ACCT 2602 or FIN 6902.

ACCT 6960 Seminar in Accounting 2 s.h.
Specific topics selected by the staff from timely and controversial work published in the field.
Prereq.: All core courses, plus at least six hours (6900-level) in accounting or permission of instructor.
ACCT 6968 Special Topics in Accounting 1-3 s.h.
Topics may vary from semester to semester and will be announced with prerequisites and hours. May be repeated.

ACCT 6968U Special Topics in Accounting Creative Problem Solving 1-3 s.h.
Topics may vary from semester to semester and will be announced with prerequisites and hours. May be repeated.

ACCT 6970 Capstone Experience 4 s.h.
A culmination of learning experiences necessary for accounting professionals. Strong emphasis will be placed upon the CPA/CMA exam experience. An integrative, team-based project will be required. Program level assessment will be a component of this course, both in terms of technical knowledge and other program-level learning goals.
Prereq.: ACCT 5814, ACCT 6930, completion of at least 12 hours of MAcc coursework.

ACCT 6972 Audit Theory Review and Practice 2 s.h.
A culmination of learning experiences in the auditing area necessary for accounting professionals, with a strong emphasis placed upon the CPA (Certified Public Accountant) exam in the financial accounting areas. An integrative, practice-based project in auditing will be required.
Prereq.: undergraduate major in accounting or its equivalent.

ACCT 6974 Financial Accounting Theory Review and Practice 2 s.h.
A culmination of learning experiences in the financial accounting area necessary for accounting professionals, with a strong emphasis placed upon the CPA (Certified Public Accountant) exam in the financial accounting area. An integrative, practice-based project in financial accounting will be required.
Prereq.: undergraduate major in accounting or its equivalent.

ACCT 6975 Business Tax Planning 2 2 s.h.
This course continues the study of income tax laws concerning corporations generally, including Subchapter S corporations, corporate reorganizations, partnership taxation, and tax administration and practice.
Prereq.: ACCT 6905.

ACCT 6980 Governmental and Nonprofit Accounting 2 s.h.
A study of accounting systems for federal, state, and local governmental agencies and other not-for-profit organizations. (Not available for credit to students who have had ACCT 4820.)
Prereq.: FIN 6900 Government and Funds Accounting or equivalent.

ACCT 6996 Research Problems 1-4 s.h.
Special research project under the supervision of a graduate faculty member. Credit will be determined in each case in light of the nature and extent of the project.
Prereq.: Fifteen hours of level II MBA coursework or permission of MBA director.

Finance

FIN 2600 Finance Field Experience 1 s.h.
Internship and/or cooperative education experiences in finance. Students may be assigned to corporate, non-profit, or government entities on a semester basis. Can repeat this course once for a different field experience.
Prereq.: 2.5 GPA, department approval, and sophomore standing.

FIN 2615 Planning Your Financial Future 3 s.h.
An introductory course to personal finance planning. Emphasis on establishing financial goals and monitoring progress toward reaching those goals to improve the individual's quality of life. Topics include financial planning process, budgeting, credit, financing strategies, education planning, tax planning, etc. Open to business and non-business majors. Serves as the first course for students who are interested in the finance field.

FIN 3715 Planning Your Financial Future 3 s.h.
An introductory course to personal finance planning. Emphasis on establishing financial goals and monitoring progress toward reaching those goals to improve the individual's quality of life. Topics include financial planning process, budgeting, credit, financing strategies, education planning, tax planning, etc. Open to business and non-business majors.
Prereq.: ENGL 1550 grade of "C" or better and MATH Level 20 or higher or ACT Math Score of 18 or higher or SAT Math Score 480 or higher and Junior standing and 2.5 overall GPA.

FIN 3720 Business Finance 3 s.h.
Study of the financial problems associated with the life cycle of business. Analysis of problems relating to estimating the financial needs of an enterprise and to evaluating the alternative means of providing temporary and permanent capital. Relationship of current financial decision with financial policy is analyzed from the viewpoint of management and the investor. 2.5 overall GPA.
Prereq.: "C" or better in FIN 2603 and FIN 2603L.

FIN 3721 Personal Financial Management 4 s.h.
An integration of the comprehensive financial planning process into the individual's financial life cycle. Includes accumulation, preservation, and distribution of financial assets. Topics include financial planning basics and risk management, investment selection, retirement planning and employee benefits, tax considerations, estate and trust basics. Junior standing and 2.5 overall GPA.
Prereq.: "C" or better in FIN 3720.

FIN 3725 Real Estate Investment 3 s.h.
Topics include real property ownership, real estate markets, valuation methods, financing methods and management of real estate investments. 2.5 overall GPA.
Prereq.: "C" or better in FIN 3720.

FIN 3726 Insurance Planning 3 s.h.
Introduces students to risk management and insurance decisions in personal and business financial planning. Topics include insurance for life, health, disability, property and liability risks as well as annuities, group insurance, long-term care insurance and social security. 2.5 overall GPA.
Prereq.: "C" or better in FIN 2615 or FIN 3715 and FIN 3720.

FIN 3730 Investment Planning 4 s.h.
Introduces topics of investment planning, vehicles, analysis and strategies required in the financial planning process. Discussions are within the context of risk and return, asset valuation, various financial instruments, financial mathematics, asset pricing models and portfolio management. The aim of the course is for students to gain the knowledge to evaluate alternative investment choices in the context of client’s financial planning needs. 2.5 overall GPA.
Prereq.: "C" or better in FIN 3720.

FIN 4833 Retirement Plans & Employee Benefits 4 s.h.
Provides students with retirement and employee benefits topics required for a financial planning career discussed within the context of time value of money, inflation, and taxation. Specifically, insurance (life, disability and medical) issues, ESOPs and deferred compensation plans, private and public retirement plans and distribution rules are reviewed in-depth. 2.5 overall GPA.
Prereq.: "C" or better in FIN 3720.

FIN 4835 Advanced Business Finance 4 s.h.
In-depth examination of the techniques and analyses employed in the financial management process. Advanced study of working capital management, capital budgeting, and long- and short-term financing choices. Integrated decision making tools such as the options framework as well as economic value added. 2.5 overall GPA.
Prereq.: "C" or better in FIN 3720.

FIN 4836 Financial Markets 4 s.h.
An examination of global financial markets, institutions, and instruments with emphasis on factors influencing how firms and individuals make financing and investing decisions. Advanced coverage of primary market financing, investment banking, stock and index options, financial futures. 2.5 overall GPA.
Prereq.: "C" or better in FIN 3720 and FIN 3730.
FIN 4838  Financial Plan Development  4 s.h.
Prepares students with financial planning knowledge, skills and ability to integrate, apply and communicate to their clients. Planning recommendations are demonstrated through real-life case studies. The focus of this capstone course is on the fundamental planning practices, professional skills and integration of concepts and knowledge. 2.5 overall GPA.
Prereq.: "C" or better in FIN 3726, FIN 4833 and ACCT 4815.

FIN 4839  International Accounting and Finance  3 s.h.
Cross-functional introduction to multinational enterprises and international financial management with emphasis on foreign currency risk management; measuring and managing accounting and economic exposure; foreign trade and investment analysis; various topics in international accounting and finance. 2.5 overall GPA.
Prereq.: "C" or better in FIN 3720.

FIN 4841  Seminar in Investments and Security Markets  3 s.h.
An examination of the literature on efficient capital markets with implications for security selection and portfolio management. 2.5 overall GPA.
Prereq.: "C" or better in FIN 3720.

FIN 4845  Business Valuation  3 s.h.
Study of business valuation techniques currently used in valuing publicly traded and private equity to include: cash flows, forecasting, estimating cost of capital for public and private companies, valuation of stand-alone companies and business units from perspective of acquirer and seller. 2.5 overall GPA.
Prereq.: "C" or better in FIN 3720.

FIN 4850  Finance Internship  3 s.h.
The student is given the opportunity to relate theory to practice in a career related on-site field experience with a participating organization.
Prereq.: Finance major, junior standing, 2.75 Finance GPA, 2.5 overall GPA and approval of director.

FIN 4851  Finance Internship 2  3 s.h.
Students have the opportunity to relate theory to practice in a career related on-site field experience with a participating organization. Finance Internship 2 may be done at a different or the same organization as FIN 4850; if the same organization, higher levels of duties and performance are expected. 2.5 overall GPA, and approval of director.
Prereq.: grade of "B" or better in FIN 4850.

FIN 4852  Financial Analysis  4 s.h.
Theory and practice of financial analysis. Analysis and interpretation of financial information with emphasis on practical applications. Projected financial statements, budgeting, valuation and computer modeling of current financial problems. 2.5 overall GPA.
Prereq.: "C" or better in FIN 3720.

FIN 4860  Special Topics in Finance  1-4 s.h.
Subject matter, credit hours, and prerequisites will be announced in advance of each topic. 2.5 overall GPA.
Prereq.: Permission of director.

FIN 6900  Financial Accounting and Finance for Decision Making  4 s.h.
A survey of the fundamental concepts of financial accounting employed by general managers. Additionally, a survey of the concepts, principles, and practices of financial management used by general managers and the links between the two types of information. Permit required.

FIN 6902  Financial Accounting and Finance for Decision Making 1-2 s.h.
Participants be able to utilize foundational concepts of accounting and finance so they are able to use financial statements to determine the condition of a business. Further, participants will learn how to utilize key financial ratios, which capture key elements of a firm’s performance, to be better positioned to make more informed decisions.
Prereq.: Graduate standing.

FIN 6910  Business Internship  1-3 s.h.
Provides graduate students the opportunity to relate theory to practice through on-the-job work experience with a participating organization. The internship will serve as an elective MBA course.
Prereq.: Completion of level I MBA coursework and six semester hours of level II MBA coursework.

FIN 6912  Financial Statement Analysis  2 s.h.
This course provides an understanding of financial analysis with emphasis upon decision making. Annual reports and mini-cases involving real companies are used to illustrate important concepts and financial analysis techniques. Major topics include the analysis of the income statement, cash flow statement, balance sheet, and detailed examination of various financial ratios and their significance.
Prereq.: Graduate standing and FIN 6902.

FIN 6923  Corporate Financial Management  3 s.h.
Participants will gain an understanding of financial analysis techniques that are used when evaluating businesses, projects, budgets and other related decisions. Participants will develop a set of analytical tools for conducting historical analysis (analysis of the income statement, cash flow statement, balance sheet, interpretation of various financial ratios) as well tools associated with capital budgeting, capital structure and cost of acquiring capital.
Prereq.: Graduate Standing.

FIN 6924  Securities Analysis  3 s.h.
The major emphasis will be an in-depth, fundamental analysis of the investment merits of the common stock of a firm. This study will be accomplished by applying the appropriate analytical principles and valuation techniques to the firm’s financial statements. A research paper will be required.
Prereq.: FIN 6923.

FIN 6939  Multinational Accounting and Finance  3 s.h.
A cross-functional examination of selected topics in international accounting and finance with emphasis on developing research and problem-solving skills. Cases will be presented that teach the strategy and tactics of multinational corporate reporting and financial management.
Prereq.: FIN 6923.

FIN 6945  Business Valuation  3 s.h.
A study of business valuation techniques currently used in valuing publicly traded and private equity.
Prereq.: "C" or better in FIN 3720 or FIN 6900.

FIN 6953  Advanced Financial Analysis  3 s.h.
Applications of financial analysis to business consulting. Includes case studies and practical implementation strategies.
Prereq.: FIN 6923.

FIN 6968  Special Topics in Finance  1-3 s.h.
Topics may vary from semester to semester and will be announced with prerequisites and hours. May be repeated.

FIN 6970  Seminar in Finance  3 s.h.
Specific topics selected by the staff from timely and controversial work published in the field.
Prereq.: All core courses, plus at least six hours (6900-level) in the finance concentration, or permission of instructor.

FIN 6996  Research Problems  1-4 s.h.
Special research project under the supervision of a graduate faculty member. Credit will be determined in each case in light of the nature and extent of the project.
Prereq.: Fifteen hours of level II MBA coursework or permission of MBA director.

**Bachelor of Science in Business Administration in Accounting**

**CAREER OPPORTUNITIES**
The demand for accounting graduates continues to grow as financial transactions become more sophisticated, as tax laws change, and as new government regulations are introduced.

All types of organizations—public and private—require accounting personnel. Those working in private accounting can specialize in financial accounting/reporting, cost accounting, accounting information systems, managerial.
accounting, internal auditing, tax accounting, budgeting, and financial analysis. Those working in public accounting can specialize in external auditing, management advisory services, tax accounting, and valuation services.

Employers of accountants include: public accounting firms, banks, retail and wholesale businesses, manufacturers, pension funds, foundations, hospitals, universities, churches, nonprofit organizations, government agencies, and consulting companies. Self-employed accountants may set up their own offices and work for private clients.

**STUDENT EXPERIENCES**

Accounting students at Youngstown State University have the opportunity to build their technical and leadership skills through various WCBA student organizations. Specific organizations related to accounting include the Institute of Management Accountants and Beta Alpha Psi, the professional business organization for accounting, finance and information system majors. Students can also become student members of the American Institute of CPA’s, the Ohio Society of CPA’s and the Institute of Management Accountants.

All business majors are strongly encouraged to complete internships. Internships are career-related work experiences that enable students to apply their knowledge and skills in an organizational setting. In the WCBA, internships that are approved for academic credit must be paid. Completing a career-related internship markedly improves a student’s job prospects upon graduation.

**REQUIREMENTS TO SIT FOR THE CERTIFIED PUBLIC ACCOUNTANTS (CPA) EXAM**

Ohio residents wishing to sit for the Certified Public Accountant (CPA) exam are currently required to have completed 150 semester hours of education. It should be noted however that proposed legislation would reduce the education requirement to sit for the exam to 120 semester hours of study. For those interested in meeting the current 150 semester hour requirement the WCBA offers the Master of Accountancy (MACc) Program. This program is a 30 semester hour graduate program. With proper planning and coordination, a student can complete both a BSBA and MACc in five years. For more information on sitting for the CPA exam, please contact the Accountancy Board of Ohio (http://www.acc.ohio.gov/).

For more information, visit the Lariccia School of Accounting and Finance (http://www.ysu.edu/academics/williamson-college-business-administration/).

**ACCOUNTING MAJOR REQUIREMENTS**

Business Tool courses must be completed with the grade of a "C" or higher and CANNOT be taken credit/no credit.

- BUS 1500 Exploring Business 3
- BUS 2600 Business Applications of Microsoft Excel 3
- MATH 1552 Applied Mathematics for Management 4
- ECON 2610 Principles 1: Microeconomics 3
- ECON 2630 Principles 2: Macroeconomics 3
- MGT 2604 Legal Environment of Business 1 3
- ACCT 2602 Financial Accounting 3
- ACCT 2603 Managerial Accounting 3
- ECON 3788 Statistics for Business and Economics 1 3
- ENGL 3742 Business Writing 3

**BUSINESS CORE REQUIREMENTS**

To enroll in upper level business courses students must have successfully completed ENGL 1549 or 1550, ENGL 1551, PHIL 2628, CMST 1545, all business tool courses AND have a minimum 2.5 overall GPA.

Upper level business courses must be completed with the grade of a "C" or higher and cannot be taken credit/no credit.

- BUS 3715 Principles of International Business 3
- BUS 3700 Business Analytics 3
- FIN 3720 Business Finance 3
- MKTG 3702 Business Professionalism 1
- MKTG 3703 Marketing Concepts and Practice 3
- MGT 3725 Fundamentals of Management 3
- MGT 3789 Operations Management 3
- MGT 4850 Strategic Management and Leadership 3

**FIRST YEAR REQUIREMENT - STUDENT SUCCESS SEMINAR**

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<tr>
<th>COURSE</th>
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<tr>
<td>YSU 1500</td>
<td>Success Seminar</td>
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<td>or HONR 1500</td>
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**GENERAL EDUCATION**

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<tr>
<td>ENGL 1550</td>
<td>Writing 1</td>
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<tr>
<td>or ENGL 1549</td>
<td>Writing 1 with Support</td>
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<td>ENGL 1551</td>
<td>Writing 2</td>
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<tr>
<td>CMST 1545</td>
<td>Communication Foundations</td>
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<td>Mathematics requirement</td>
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**BUSINESS TOOL COURSES**

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**Total Semester Hours**

121-123

**Year 1**

**Fall**

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**Semester Hours**

17-19

**Spring**

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<td>BUS 2600</td>
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</table>
Learning Outcomes

The student learning outcomes for majors within the Lariccia School of Accounting and Finance are as follows:

- Students will be able to identify, formulate, and solve discipline-specific problems within the context of business, ethical, and societal constraints;
- Students will learn to function and communicate (in writing and orally) both individually and within multidisciplinary teams;
- Students will develop enhanced technology skills by being exposed to assignments requiring advanced computer/spreadsheet knowledge, expanded presentation activity (e.g. PowerPoint in the oral-intensive courses), and required analysis of financial statements;
- Students will be given opportunities to work with and be exposed to the business community and professionals through internship opportunities, student organizations, and social functions;
- Students will obtain an understanding of professional and ethical responsibilities and a recognition of and an appreciation for the need to engage in life-long learning.

Bachelor of Science in Business Administration in Finance, Certified Financial Planning Track

The Certified Financial Planner (CFP) track focuses on working directly with individuals, helping them to plan for and meet their short- and long-term financial goals. Students must learn to fully understand the client’s financial situation as well as financial laws and legal documents. Investment types commonly dealt with include investments and security planning, estate planning, tax planning, employee benefits planning, and insurance planning.

CAREER OPPORTUNITIES

The demand for qualified personal financial planners is growing rapidly. This demand is due in part to the many Americans who are reaching retirement age in need of personal financial planning expertise. A good financial planner understands investments, taxes, estate planning issues, and how to talk and listen to people. They work in financial services, banks, wealth management companies and independently as entrepreneurs in the field. YSU students who have successfully completed all requirements of BS in Finance CFP Track satisfy the education coursework requirement of the CFP Board and are eligible to sit for The CFP® Certification Examination.

All business majors are strongly encouraged to complete internships. Internships are career-related work experiences that enable students to apply their knowledge and skills in an organizational setting. In the WCBA, internships that are approved for academic credit must be paid. Completing a career-related internship increases a student’s job opportunities upon graduation.

STUDENT EXPERIENCES

Finance students at Youngstown State University have the opportunity to build their knowledge and leadership skills through a variety of WCBA student organizations (http://www.ysu.edu/academics/williamson-college-business-administration/student-organizations-and-experiences/), including the Student Investment Fund.

COURSE | TITLE | S.H.
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FIRST YEAR REQUIREMENT - STUDENT SUCCESS SEMINAR
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or SS 1500 | Strong Start Success Seminar | 1-2
or HONR 1500 | Intro to Honors | 1-2

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<td>ENGL 1550</td>
<td>Writing 1</td>
<td>3-4</td>
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<tr>
<td>or ENGL 1549</td>
<td>Writing 1 with Support</td>
<td>3-4</td>
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</table>
Bachelor of Science in Business Administration in Finance, Certified Financial Planning Track

| ENGL 1551 | Writing 2 | 3 |
| CMST 1545 | Communication Foundations | 3 |
| Mathematics requirement Met through MATH 1552 (See Business Tool) |
| Arts and Humanities (1 course) 3 SH met through PHIL 2628 |
| PHIL 2628 | Business Ethics (required for major) | 3 |
| Natural Science (2 courses, 1 with lab) | 7 |
| Social Science (2 courses) Met through ECON 2610 and ECON 2630 |
| Social and Personal Awareness (2 courses) | 6 |

**BUSINESS TOOL COURSES**

Business Tool courses must be completed with the grade of a "C" or higher and cannot be taken credit/no credit.

- BUS 1500 Exploring Business | 3 |
- MATH 1552 Applied Mathematics for Management | 4 |
- ECON 2610 Principles 1: Microeconomics | 3 |
- ECON 2630 Principles 2: Macroeconomics | 3 |
- MGT 2604 Legal Environment of Business 1 | 3 |
- ACCT 2603 Financial Accounting | 3 |
- ACCT 2603 Managerial Accounting | 3 |
- ENGL 3742 Business Writing | 3 |
- ECON 3788 Statistics for Business and Economics 1 | 3 |
- BUS 2600 Business Applications of Microsoft Excel | 3 |

**BUSINESS CORE COURSES**

To enroll in upper level business courses a student must be successfully completed with ENGL 1550, ENGL 1551, PHIL 2628, CMST 1545, ALL Business Tool courses and have a minimum 2.5 overall GPA.

Upper level business courses must be completed with the grade of a "C" or higher and cannot be taken credit/no credit.

- BUS 3715 Principles of International Business | 3 |
- BUS 3700 Business Analytics | 3 |
- FIN 3720 Business Finance | 3 |
- MKTG 3702 Business Professionalism | 1 |
- MKTG 3703 Marketing Concepts and Practice | 3 |
- MGT 3725 Fundamentals of Management | 3 |
- MGT 3761 Management Information Systems | 3 |
- MGT 3789 Operations Management | 3 |
- MGT 4850 Strategic Management and Leadership | 3 |

**CERTIFIED FINANCIAL PLANNING REQUIRED COURSES**

- FIN 3715 Planning Your Financial Future | 3 |
- FIN 3726 Insurance Planning | 3 |
- FIN 3730 Investment Planning | 4 |
- FIN 4833 Retirement Plans & Employee Benefits | 4 |
- FIN 4838 Financial Plan Development | 4 |
- ACCT 4813 Federal Taxation 1 | 4 |
- ACCT 4815 Estate Planning | 3 |
- FINANCE UPPER LEVEL COURSE | 3 |

Select 3 SH of upper level Finance courses not included in major.

**BUSINESS UPPER LEVEL COURSES**

Select 7 SH of upper level business courses (ACCT, ADV, BUS, ENT, FIN, MGT, MKTG). Students should consider at least one internship for credit.

**Total Semester Hours 120-122**

### Year 1

**Spring**

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<tbody>
<tr>
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### Year 2

**Fall**

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**Spring**

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<td>ACCT 2603</td>
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### Year 3

**Fall**

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<td>ACCT 2602</td>
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<td>ECON 2630</td>
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<td>PHIL 2628</td>
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**Spring**

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<td>BUS 3715</td>
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### Year 4

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**Spring**

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### Year 5

**Fall**

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<tbody>
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<td>ACCT 4815</td>
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<td>FIN 4833</td>
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<td>MGT 3761</td>
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<table>
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</table>
and Finance are the Student Investment Fund, the Institute of Management and organizations-and-experiences/ www.ysu.edu/academics/williamson-college-business-administration/student-experiences/.

Finance students at Youngstown State University have the opportunity to build their leadership skills through various WCBA student organizations (http://www.ysu.edu/academics/williamson-college-business-administration/student-organizations-and-experiences/). Housed in the Lariccia School of Accounting and Finance are the Student Investment Fund, the Institute of Management and organizations spending a great deal of time developing strategies to help the organization realize its long-term goals. Financial Managers supervise the preparation of financial reports, guide investment activities, and execute cash-management strategies.

Financial Managers can be found in nearly all firms, government agencies, and organizations. They help manage the finances of an organization. Examples of duties include analyzing financial information and competitor data, making recommendations based on the financial information, and monitoring results. Employers hiring Financial Management track students include banks, investment companies, insurance companies, financial institutions, and publicly traded and privately held companies.

Learning Outcomes

The student learning outcomes for majors within the Lariccia School of Accounting and Finance are as follows:

- Students will be able to identify, formulate, and solve discipline-specific problems within the context of business, ethical, and societal constraints;
- Students will learn to function and communicate (in writing and orally) both individually and within multidisciplinary teams;
- Students will develop enhanced technology skills by being exposed to assignments requiring advanced computer/spreadsheet knowledge, expanded presentation activity (e.g., PowerPoint in the oral-intensive courses), and required analysis of financial statements;
- Students will be given opportunities to work with and be exposed to the business community and professionals through internship opportunities, student organizations, and social functions;
- Students will obtain an understanding of professional and ethical responsibilities and a recognition of and an appreciation for the need to engage in life-long learning.

Bachelor of Science in Business Administration in Finance, Financial Management Track

The Financial Management track of the Finance major focuses on managing the finances of an organization as opposed to individuals. Examples of duties include analyzing financial information and competitor data, making recommendations based on the financial information, and monitoring outcomes. Employers hiring Financial Management track students include banks, investment companies, insurance companies, financial institutions, and publicly traded and privately held companies.

career opportunities

Financial Managers can be found in nearly all firms, government agencies, and organizations spending a great deal of time developing strategies to help the organization realize its long-term goals. Financial Managers supervise the preparation of financial reports, guide investment activities, and execute cash-management strategies.

All business majors are strongly encouraged to complete internships.

Internships are career-related work experiences that enable students to apply their knowledge and skills in an organizational setting. In the WCBA, internships that are approved for academic credit must be paid. Completing a career-related internship increases a student’s job opportunities upon graduation.

student experiences

Finance students at Youngstown State University have the opportunity to build their leadership skills through various WCBA student organizations (http://www.ysu.edu/academics/williamson-college-business-administration/student-organizations-and-experiences/). Housed in the Lariccia School of Accounting and Finance are the Student Investment Fund, the Institute of Management and organizations-and-experiences/ www.ysu.edu/academics/williamson-college-business-administration/student-experiences/.

To enroll in upper level Business courses students must have successfully completed ENGL 1550, ENGL 1551, PHIL 2628, CMST 1545, all Business Tool courses AND have a minimum 2.5 overall GPA.

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- Students will obtain an understanding of professional and ethical responsibilities and a recognition of and an appreciation for the need to engage in life-long learning.
Select 8 semester hours of upper level finance courses. Students should consider at least one internship.

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<tr>
<th>BUSINESS UPPER LEVEL COURSES</th>
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<tr>
<td>Select 8 SH of upper level business courses (ACCT, ADV, BUS, ENT, FIN, MGT, MKTG)</td>
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**Total Semester Hours** 120-122

### Year 1

#### Spring

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<th>COURSE</th>
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<td>ECON 2610</td>
<td>Principles 1: Microeconomics</td>
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<td>BUS 2600</td>
<td>Business Applications of Microsoft Excel</td>
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**Semester Hours** 15

#### Fall

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<td>Writing 1 or Writing 1 with Support</td>
<td>3-4</td>
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<td>BUS 1500</td>
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<td>MATH 1552</td>
<td>Applied Mathematics for Management</td>
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<td>CMST 1545</td>
<td>Communication Foundations</td>
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**Semester Hours** 17-19

### Year 2

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<td>MKTG 3702</td>
<td>Business Professionalism</td>
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<td>Statistics for Business and Economics 1</td>
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<td>GE: Lab Science</td>
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<td>GE: Social and Personal Awareness</td>
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**Semester Hours** 14

#### Fall

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<td>ACCT 2602</td>
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<td>ENGL 3742</td>
<td>Business Writing</td>
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<td>PHIL 2628</td>
<td>Business Ethics</td>
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<td>ECON 2630</td>
<td>Principles 2: Macroeconomics</td>
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**Semester Hours** 15

### Year 3

#### Spring

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<td>Investment Planning</td>
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<tr>
<td>FIN 4835</td>
<td>Advanced Business Finance</td>
<td>4</td>
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<tr>
<td>BUS 3715</td>
<td>Principles of International Business</td>
<td>3</td>
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<tr>
<td>MGT 3761</td>
<td>Management Information Systems</td>
<td>3</td>
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**Semester Hours** 17

#### Fall

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<tr>
<td>FIN 3720</td>
<td>Business Finance</td>
<td>3</td>
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<tr>
<td>MKTG 3703</td>
<td>Marketing Concepts and Practice</td>
<td>3</td>
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<tr>
<td>MGT 3725</td>
<td>Fundamentals of Management</td>
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<tr>
<td>BUS 3700</td>
<td>Business Analytics</td>
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**Semester Hours** 15

### Year 4

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**Semester Hours** 13

#### Fall

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<tr>
<td>ACCT 3701 or ACCT 4813</td>
<td>Intermediate Accounting 1 or Federal Taxation 1</td>
<td>4</td>
</tr>
<tr>
<td>FIN 4853</td>
<td>Financial Analysis</td>
<td>4</td>
</tr>
<tr>
<td>MGT 3789</td>
<td>Operations Management</td>
<td>3</td>
</tr>
<tr>
<td>Upper Level Finance Course</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

**Semester Hours** 14

**Total Semester Hours** 120-122

To enroll in upper level Business courses students must have successfully completed ENGL 1550, ENGL 1551, PHIL 2628, CMST 1545, all Business Tool courses AND have a minimum 2.5 overall GPA.

### Learning Outcomes

The student learning outcomes for majors within the Lariccia School of Accounting and Finance are as follows:

- Students will be able to identify, formulate, and solve discipline-specific problems within the context of business, ethical, and societal constraints;
- Students will learn to function and communicate (in writing and orally) both individually and within multidisciplinary teams;
- Students will develop enhanced technology skills by being exposed to assignments requiring advanced computer/spreadsheet knowledge, expanded presentation activity (e.g. PowerPoint in the oral-intensive courses), and required analysis of financial statements;
- Students will be given opportunities to work with and be exposed to the business community and professionals through internship opportunities, student organizations, and social functions;
- Students will obtain an understanding of professional and ethical responsibilities and a recognition of and an appreciation for the need to engage in life-long learning.

### Minor in Accounting

Youngstown State University students are invited to enhance their educational experience with a minor in Accounting. Accounting can be described as a service activity, a descriptive/analytical discipline, and an information system. As a service activity, it provides users with quantitative financial information to aid in making business-related decisions. The minor in Accounting can be met through successful completion of the following requirements:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 2602</td>
<td>Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 2603</td>
<td>Managerial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 3701</td>
<td>Intermediate Accounting 1</td>
<td>4</td>
</tr>
<tr>
<td>ACCT 3702</td>
<td>Intermediate Accounting 2</td>
<td>4</td>
</tr>
<tr>
<td>ACCT 3711</td>
<td>Cost Accounting</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Semester Hours** 18-20
Students interested in declaring a minor in Accounting need to complete an Intra University Transfer Request form with their academic advisor. Students pursuing a WCBA minor must meet all course prerequisites to enroll WCBA courses, including a minimum 2.5 overall GPA for upper level business courses. WCBA minor courses must be completed with the grade "C" or higher and cannot be taken credit/no credit.

Minor in Finance
Youngstown State University students are invited to enhance their educational experience with a minor in Finance. The role of finance professionals is to provide information and analyses to organizations and individuals that will result in superior decision making. Students interested in learning more about the field of finance through a minor would need to complete the following requirements:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIN 3715</td>
<td>Planning Your Financial Future (formerly FIN 2615)</td>
<td>3</td>
</tr>
<tr>
<td>FIN 3720</td>
<td>Business Finance</td>
<td>3</td>
</tr>
<tr>
<td>FIN 3730</td>
<td>Investment Planning</td>
<td>4</td>
</tr>
<tr>
<td>FIN 4835</td>
<td>Advanced Business Finance</td>
<td>4</td>
</tr>
<tr>
<td>FIN 4836</td>
<td>Financial Markets</td>
<td>4</td>
</tr>
<tr>
<td>or FIN 4853</td>
<td>Financial Analysis</td>
<td></td>
</tr>
</tbody>
</table>

Total Semester Hours 18

Students interested in declaring a minor in Finance need to complete an Intra University Transfer Request form with their academic advisor. Students must meet course prerequisites, including a minimum 2.5 overall GPA to enroll in upper level business courses. WCBA courses must be completed with the grade of a "C" or higher and cannot be taken Credit/No Credit.

Economics

Introduction
The Economics program within the Lariccia School offers bachelor's degrees in Economics and Business Economics. At the graduate level, we offer master's degrees in Economics and Financial Economics. At both the undergraduate and graduate levels, all students must complete a capstone project which gives them "hands on" experience in empirical research. Our "4+1" program allows highly qualified students to take up to nine semester hours of graduate coursework that can be counted both towards a bachelor's degree and a master's degree, accelerating their time to completion for the master's degree.

YSU alumni from economics have gone on to successful careers in government, the private sector, and academia. Career opportunities for economists continue to be strong, especially for students who complete a graduate degree.

The Economics Club, a student organization, regularly sponsors speakers who describe their careers in the field of economics. We also have an active chapter of Omicron Delta Epsilon, the national honorary society for economics students. The department stays in touch with students, alumni, and the YSU campus community through our newsletter.

Welcome
What is Economics about? In a nutshell, it is about how to make sound decisions. For example, when individuals want to know how much money to save for retirement, when a company tries to determine what to produce and how much to charge, or when a government considers the amount of tax imposed on cigarettes, good knowledge of Economics provides a powerful set of tools in those decision-making processes.

The Economics programs at YSU offer both undergraduate and graduate degrees that aim to help students master valuable knowledge and develop real-world skills along with a sense of enlightenment and fulfillment. Studying economics can also be fun because the questions asked are both intellectually stimulating and relevant to our lives. Our rigorous curricula emphasize applications of economic principles and analysis. In their last semester, both undergraduate and graduate students have the opportunity of conducting research using real economic or business data.

There are a wide range of employment opportunities for our economics majors, both in local, regional, or national governments and in fields like accounting, banking, finance, or insurance. Economics majors are a good fit for career choices like Market Research Analyst, Financial Planner/Adviser, Economic Consultant, Risk Analyst, Political Scientist, Policy Analyst, Actuary, etc. Some of our majors, after graduation, choose to go to law schools or pursue a doctorate degree in Economics or Finance.

If you have any questions about our programs, please feel free to contact me at (330) 941-3076.

Jeremy Schwartz, Acting Director

Contact Information
Jeremy Schwartz, Acting Director - jtschwartz@ysu.edu - (330) 941-3076
Ebenge Usip, Graduate Coordinator - eeousip@ysu.edu - (330) 941-1682
Nancy O’Hara, Administrative Assistant - neohara@ysu.edu - (330) 941-3428

For more information, visit the Economics (http://www.ysu.edu/academics/college-liberal-arts-social-sciences/economics-major/) web page.

Advising
All students pursuing the BA in Economics or the BSBA in Business Economics are advised through the Williamson College of Business Administration (visit the WCBA Advising website (http://www.ysu.edu/academics/williamson-college-business-administration/ advisement/)). To schedule an appointment, please call (330) 941-2376.

All students should meet with an advisor each semester prior to registering for their classes. Course selection is a critical part of finishing your degree in a timely manner.

Students pursuing the MA in Economics and the MA in Financial Economics are advised by the department’s Graduate Coordinator, Ebenge Usip. He can be contacted via email at eeousip@ysu.edu and by phone at (330) 941-1682.

Courses Relevant to Other Majors
Below are several different majors and the economics courses most relevant to those majors:

### Political Science

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
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<tbody>
<tr>
<td>ECON 3702</td>
<td>Public Finance</td>
<td>3</td>
</tr>
<tr>
<td>ECON 4855</td>
<td>Health Economics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 5843</td>
<td>Economics of Poverty, Transfers and Discrimination</td>
<td>3</td>
</tr>
</tbody>
</table>

### Accounting and Finance

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
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<tbody>
<tr>
<td>ECON 3701</td>
<td>Money and Banking</td>
<td>3</td>
</tr>
<tr>
<td>ECON 3710</td>
<td>Intermediate Microeconomic Theory</td>
<td>3</td>
</tr>
<tr>
<td>ECON 3712</td>
<td>Intermediate Macroeconomic Theory</td>
<td>3</td>
</tr>
<tr>
<td>ECON 5809</td>
<td>Current Problems in Money, Banking, and Financial Markets</td>
<td>3</td>
</tr>
</tbody>
</table>
ECON 5811 | International Trade | 3
ECON 5812 | International Finance | 3

**Marketing**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
</table>
| ECON 3710 | Intermediate Microeconomic Theory | 3
| ECON 3712 | Intermediate Macroeconomic Theory | 3
| ECON 5801 | Economics of Industrial Organization | 3

**Management**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
</table>
| ECON 3710 | Intermediate Microeconomic Theory | 3
| ECON 3712 | Intermediate Macroeconomic Theory | 3
| ECON 4810 | Managerial Economics | 3
| ECON 5801 | Economics of Industrial Organization | 3
| ECON 5831 | Labor Markets and the Economics of Unions | 3

**Pre-Law**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
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</thead>
</table>
| ECON 3702 | Public Finance | 3
| ECON 3710 | Intermediate Microeconomic Theory | 3
| ECON 3712 | Intermediate Macroeconomic Theory | 3

**Environmental Studies**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
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</thead>
</table>
| ECON 3705 | Environmental and Resource Economics | 3
| ECON 3710 | Intermediate Microeconomic Theory | 3
| ECON 3712 | Intermediate Macroeconomic Theory | 3

**Professor**

Ou Hu, Ph.D., Professor
Tomi P. Ovaska, Ph.D., Professor
Joseph Palardy, Ph.D., Professor
Dennis A. Petruska, Ph.D., Professor
Albert J. Sumell, Ph.D., Professor
Yogesh Uppal, Ph.D., Professor
Ebenge E. Usip, Ph.D., Professor
Yaqin Wang, Ph.D., Professor

**Lecturer**

Sarah E. Jenyk, M.A., Senior Lecturer

**Majors**

- BA in Economics (http://catalog.ysu.edu/undergraduate/colleges-programs/college-liberal-arts-social-sciences/department-economics/ba-economics/)
- BSBA in Business Economics (p. 563)
- "4+1" Bachelor's/Master's Program (p. 562)

**Minors**

- Economics Minor (http://catalog.ysu.edu/undergraduate/colleges-programs/college-liberal-arts-social-sciences/department-economics/economics-minor/)

- Economics with Statistics Minor (http://catalog.ysu.edu/undergraduate/colleges-programs/college-liberal-arts-social-sciences/department-economics/economics-statistics-minor/)

**ECON 1501 Economics in Action 3 s.h.**
An introduction to the United States’ economic system and institutions through the examination of current economic problems. Not applicable for a major or minor in economics. Credit will not be given for 1501 if a student has already received credit for ECON 2610 or its equivalent.

Gen Ed: Social Science.

**ECON 1502 Panic and Prosperity, United States Economic Policy Since the Great Depression 3 s.h.**
Examines the crises and successes of the American economy since 1929, and how the economic policies of different presidential administrations affected the lives of U.S. citizens. Not applicable towards a major or minor in economics.

Gen Ed: Social Science.

**ECON 1503 Rich and Poor: Diversity and Disparity in the United States Workplace 3 s.h.**
Examines how labor markets determine the distribution of income and the dramatic changes in the composition of the American labor force. Explores such issues as the widening gap between low and upper income groups, the characteristics of the poor, affirmative action, the glass ceiling, the mommy track, and family-friendly working environments. Not applicable towards a major or minor in economics.

Gen Ed: Domestic Diversity, Social Science, Social and Personal Awareness.

**ECON 1504 Economics of Aging 3 s.h.**
An introduction to the economic consequences of an aging population and the economic status of the aged. Topics include income adequacy in old age, retirement decisions, retirement income planning, social security income, employer-sponsored pensions, and financing health care. Not applicable toward a major or minor in economics.

Prereq.: ECON 1501 or GERO 1501.

**ECON 1505 Introduction to Personal Financial Literacy 3 s.h.**
An introduction to personal financial planning. Topics covered include budgeting, the use of credit, taxes, savings accounts, investment strategies, insurance, buying a home, career planning, and retirement planning. Students will gain the knowledge and resources to be better prepared for their financial future.


**ECON 2610 Principles 1: Microeconomics 3 s.h.**
Introduction to the theory of markets, including the behavior of consumers and the conduct of private and public business enterprise. Effects of monopoly and competition on private and social welfare. The role of government in promoting the economic welfare of consumers, workers, and minorities.

Prereq.: Level 20 or higher on the math placement exam.

Gen Ed: Social Science.

**ECON 2630 Principles 2: Macroeconomics 3 s.h.**
Studies of growth, inflation, and unemployment at the national level and the performance of the U.S. economy in the global setting. The impacts of national economic policies on individual and social welfare. An extensive discussion and evaluation of the U.S. banking system and its effects on individuals and businesses.

Prereq.: ECON 2610.

Gen Ed: Social Science.

**ECON 2631 Introductory Macroeconomics for Education Majors 3 s.h.**
Measurement of the national economy’s performance (growth, inflation, and unemployment), the banking system, the impact of government on macroeconomic performance, and international macroeconomics. Principles of personal finance, including budgeting, the use of credit, and financial planning are also discussed. Open only to education majors. Credit will not be given for both ECON 2630 and ECON 2631.

Prereq.: FOUN 1501 and ECON 2610.
ECON 3701 Money and Banking 3 s.h.
Organization and operation of commercial banking in the United States; central banking under the Federal Reserve System; basic theory. Monetary policy as a determinant of national income. 
Prereq.: ECON 2630.

ECON 3702 Public Finance 3 s.h.
The development and present status of public finance; federal, state and local expenditures and taxation; theories of tax incidence, axioms of taxation, theories in justification and government spending; tax reform. Study of the techniques of fiscal policy with emphasis on its role as a determinant of the level of national income.
Prereq.: ECON 2610.

ECON 3703 Behavioral Economics 3 s.h.
Uses insights from economics and psychology to explain why normally rational people make poor choices in their lives, be it in terms of money, health, education or long-term happiness. This introductory course explores the sources of poor economic choices and examines ways to improve them.
Prereq.: ECON 2610 or PSYC 1560.

ECON 3704 Emerging Economies in Asia 3 s.h.
Introduction to emerging economies in Asia, mainly in East Asia and India where the economies in recent decades have generally performed well compared with the rest of the world. Focus is on the development strategies and policies of the region's major economies with an aim in contrasting their experience with the industrialized nations in the West.
Prereq.: ECON 1501, ECON 2610, or ASST 1550.

ECON 3705 Environmental and Resource Economics 3 s.h.
Application of economic theory to environmental problems, analysis of policy alternatives for pollution abatement, and the conservation of exhaustible resources. Determination of efficient management of local and national pollution levels, including air, water, and toxic substances. Possible economic consequences associated with global warming.
Prereq.: ECON 1501 or ECON 2610.

ECON 3710 Intermediate Microeconomic Theory 3 s.h.
A systematic analysis of the theory of demand and the theory of the firm: production input and output choices, and some basic concepts of linear programming. An intensive analysis of the theory of the firm: competitive pricing, monopoly pricing, pricing in imperfect competition; and the theory of rent, profits, interest and wages.
Prereq.: ECON 2610, and either MATH 1552, MATH 1570, or MATH 1571; For Actuarial Science minors, the prerequisite is either MATH 1571 or MATH 1572.

ECON 3712 Intermediate Macroeconomic Theory 3 s.h.
The construction of national income and production accounts and the basic determinant of income, output, and employment. Determination of the level of employment, interest, and money through the classical versus Keynesian aggregate economics.
Prereq.: ECON 2630 and either MATH 1552, MATH 1570, or MATH 1571; For Actuarial Science minors, the prerequisite is either MATH 1571 or MATH 1572.

ECON 3720 Comparative Economic Systems 3 s.h.
An examination of the recent world-wide trend toward free market economy, giving particular attention to basic processes such as resource allocation and product distribution. Frequent references are made to the failure of Socialism in the USSR and the new approach in Russia, Eastern Europe and China toward market economies.
Prereq.: ECON 1501 or ECON 2630.

ECON 3724 Public Budgeting 3 s.h.
Study of the politics, theories, and techniques of public budgeting. Includes the process of budget preparation, adoption and execution. Topics include debt management and capital budgets. (This course is cross-listed with POL 3724.)
Prereq.: POL 3720.

ECON 3788 Statistics for Business and Economics 1 3 s.h.
Introduction to statistical methods in data analysis and forecasting. Topics include descriptive statistics, probability, sampling and sampling distributions, and hypothesis testing. Practical application of statistical procedures is incorporated into regularly scheduled computer workshops. Credit will not be given for ECON 3788 if a student has already received credit for ECON 3790 or its equivalent.
Prereq.: MATH 1510.

ECON 3789 Statistics for Business and Economics 2 3 s.h.
This course builds on concepts introduced in ECON 3788. Specific topics include hypothesis testing, regression analysis, ANOVA and time series analysis. Practical application of statistical procedures is incorporated into regularly scheduled computer workshops. Credit will not be given for ECON 3789 if a student has already received credit for ECON 3790 or its equivalent. 3 s.h.
Prereq.: ECON 3788.

ECON 4810 Managerial Economics 3 s.h.
An application of economic analysis to business problems. Emphasis upon executive decisions for the allocation of resources.
Prereq.: ECON 2610.

ECON 4855 Health Economics 3 s.h.
Application of basic principles to the study of the health care industry. Topics include the supply and demand of medical care, the effects of private and public insurance on the health care industry, trends in health care costs, public policies to equalize access to medical care and the dilemma caused by the improvement in life-sustaining technology.
Prereq.: ECON 2610.

ECON 4860 Selected Topics in Economics 3 s.h.
Advanced study of selected topics in economic analysis and issues in economic policy. May be repeated once with different topic.
Prereq.: ECON 2610 and ECON 2630.

ECON 4860D ST Game Theory 3 s.h.
Advanced study of selected topics in economic analysis and issues in economic policy. May be repeated once with different topic.
Prereq.: ECON 2610 and ECON 2630.

ECON 4860E Selected Topics in Economics Sports Economics 3 s.h.
Advanced study of selected topics in economic analysis and issues in economic policy. May be repeated once with different topic.
Prereq.: ECON 2610 and ECON 2630.

ECON 4870 Economics Internship 3 s.h.
The practical application of economic knowledge and statistical skills in the workplace. Students assist professionals in various kinds of industrial, financial, and public service organizations.
Prereq.: By permit only, minimum GPA 2.5.

ECON 4880 Analysis of Economic Problems 3 s.h.
The application and extension of the student's skills in economic analysis and statistical techniques to economic issues. The course covers sources of data, exploratory data techniques, matching of data and statistical tests, interpretation and presentation of the results. Students demonstrate their command of research techniques by the completion of a research paper and oral presentation. Topics to be determined.
Prereq.: ECON 3710, ECON 3712, and ECON 3790; or ECON 3788 and ECON 3789; or ECON 3788 and BUS 3700.

Gen Ed: Capstone.

ECON 4898 Graduate Study in Selected Economic Topics 3 s.h.
For undergraduates taking courses in the MA in Economics program for credit towards an undergraduate degree. Credit earned cannot be later applied to a graduate degree. The student must meet the criteria for undergraduate students taking graduate coursework listed in the Graduate Bulletin. May be repeated with different graduate courses.
Prereq.: A minimum of 20 hours of coursework in economics at the 2600 level and above, permission of the chair, junior standing.
Bachelor of Arts in Economics

ECON 4899 Individual Study in Economics 1-4 s.h.
Individual study of a topic, area, or problem requiring in-depth reading, and a written project. May be repeated once with a different topic, area, or problem.
Prereq.: Junior or senior standing, by permit only.

ECON 5801 Economics of Industrial Organization 3 s.h.
A systematic analysis of the structure, conduct, and performance of American industry. A quantitative analysis plus a comprehensive review of theoretical models of the market, firm behavior, and performance.
Prereq.: ECON 2610.

ECON 5806 History of Economic Thought 3 s.h.
Designed to provide students with an understanding of the development of economic ideas to include: Mercantilism, Physiocrats, the English Classical School, Utilitarianism, early Social Thought, Karl Marx, the German Historical School, Institutionalists and the Keynesian School.
Prereq.: ECON 2630.

ECON 5809 Current Problems in Money, Banking, and Financial Markets 3 s.h.
The financial market system, including money and capital markets. Current problems associated with trends in theory and practice. Theories of the interest rate and monetarism.
Prereq.: ECON 3701 or consent of instructor.

ECON 5811 International Trade 3 s.h.
Theories of international trade and specialization; free trade vs. protectionism; tariff and non-tariff barriers to international trade; international balance of payments and its components; the role of multinational enterprises in contemporary trade pattern; regional economic integrations and world trade; U.S. commercial policies.
Prereq.: ECON 2630.

ECON 5812 International Finance 3 s.h.
Theories of foreign exchange and capital movements, international payments, analysis of spot and forward foreign exchange markets, foreign exchange market arbitrage, speculation, and risk hedging. The Bretton Woods agreement and the contemporary international monetary system. The rise of international organizations and multinational enterprises in the international economy.
Prereq.: ECON 2630.

ECON 5822 Urban and Regional Economics 3 s.h.
Economic analysis of the problems of urbanized areas and the causes of the growth or decline in economic activity in small-area economics. Topics include benefit-cost analysis, economic base analysis, input-output applications, and the theory of location and agglomeration.
Prereq.: ECON 2610.

ECON 5824 Applied Time Series Analysis of Economic and Business Data 3 s.h.
An in-depth analysis of time series models and their applications to problems in economics and business. Emphasis on forecasting. Extensive use of standard computer programs.
Prereq.: ECON 2610 and STAT 4817 or ECON 3790 or (ECON 3788 and ECON 3789) or (ECON 3788 and BUS 3700).

ECON 5831 Labor Markets and the Economics of Unions 3 s.h.
Economic theory and analysis of labor as an input in the resource market; principles, labor problems, public policy; theories of the development of the labor movement; economic objectives of trade unions; problems in public control.
Prereq.: ECON 2610.

ECON 5843 Economics of Poverty, Transfers and Discrimination 3 s.h.
Examines the measurement and causes of poverty, trends in the distribution of income, and antipoverty programs and their effectiveness. Discussions of theories of discrimination, difficulties in measuring the impact of discrimination, and policies designed to reduce discrimination.
Prereq.: ECON 2610.

ECON 5850 Introduction to Game Theory 3 s.h.
Topics include (not limited to) Nash equilibrium, pure/mixed strategy, static/dynamic games, repeated games and coordination, perfect/incomplete information, etc.
Prereq.: ECON 2610.

ECON 5853 Applied Econometrics 3 s.h.
The practice of econometrics with emphasis on model construction, estimation, and interpretation of results. Applications in the private and public sectors involve the use of computers and economic software.
Prereq.: ECON 2630 and ECON 3788.

ECON 5856 Topics in Quantitative Economics 3 s.h.
Application of different tools of mathematical economics, computational economics, and econometrics in conjunction with economic theory to model economic problems of firms, consumers, financial institutions, and public sectors. Specific content of the course will vary with the instructor. May be repeated once with a different topic.
Prereq.: ECON 3788.

ECON 5861 SAS Programming for Data Analysis 3 s.h.
An introduction to SAS programming for data analytics. Topics include using SAS for data processing, manipulation, visualization, reporting, and statistical analysis. The objective is for students to develop statistical computing skills for problem solving and decision making.
Prereq.: STAT 2601 or STAT 3717 or STAT 3743 or ECON 3790, or ECON 3788 and ECON 3789, or ECON 3788 and BUS 3700.
Cross-listed: STAT 5811.

Bachelor of Arts in Economics

A student can earn either a Bachelor of Arts (BA) in Economics through the College of Liberal Arts and Social Sciences or a Bachelor of Science in Business Administration (BS in BA) in Business Economics (http://www.ysu.edu/academics/college-liberal-arts-social-sciences/economics-major/) through the Williamson College of Business Administration. Either degree may be earned in eight semesters if students average 15 hours per semester.

To earn the BA degree, the student must satisfy all the degree requirements in the College of Liberal Arts and Social Sciences and take 32 semester hours of coursework from the Department of Economics.

The economics major is designed to prepare students for careers both in the public and private sectors and for additional study in the field of economics. Economics graduates are qualified for a wide variety of positions in the financial sector and jobs in business and government. Students frequently use a major in economics as preparation for law school. Graduates choosing to pursue additional study in economics have been very successful in gaining admission to graduate and doctoral programs.

Students who have completed 78 semester hours with a grade point average above 3.3 are eligible to participate in the department’s "4+1" program. Students in the program can take up to nine hours of coursework at the masters level which can count both towards their BA and an MA. Students who take nine hours can complete an MA in Economics in one year after graduating with their bachelor’s degree.

COURSE       TITLE                        S.H.
FIRST YEAR REQUIREMENT - STUDENT SUCCESS
YSU 1500      Success Seminar            1-2
or SS 1500    Strong Start Success Seminar
or HONR 1500  Intro to Honors

General Education Requirements
ENGL 1550     Writing 1                   3-4
or ENGL 1549  Writing 1 with Support
ENGL 1551     Writing 2                   3
CMST 1545     Communication Foundations  3
career aspirations and which courses you personally will need to take. It is extremely important that you meet with an advisor to discuss your goals. Some students will need to take additional courses prior to taking calculus, while other students may have already taken a course in calculus and would not need to take additional courses prior to taking calculus. The coursework taken will also depend on a student's career goals. It is extremely important that you meet with an advisor to discuss your career aspirations and which courses you personally will need to take.

### Major Requirements

Mathematics Requirement
- MATH 1552 or MATH 1571
- MATH 157 Calculus 1
- MATH 1510 College Algebra
- Intermediate Foreign Language

Economics courses at the 1500 level cannot be counted towards the major. The coursework taken will also depend on a student's career goals. Some students will need to take additional courses prior to taking calculus, while other students may have already taken a course in calculus and would not need to take additional courses prior to taking calculus. The coursework taken will also depend on a student's career goals. It is extremely important that you meet with an advisor to discuss your career aspirations and which courses you personally will need to take.

### Select one of these Statistics options:

- ECON 3788 Statistics for Business and Economics 1
- ECON 3789 Statistics for Business and Economics 2
- ECON 3788 Statistics for Business and Economics 1
- ECON 3789 Statistics for Business and Economics 2

Select 12 semester hours of upper-division Economics electives.

### Double major or Minor with Electives to reach 120 hours

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<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
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<tbody>
<tr>
<td>MATH 1571</td>
<td>Calculus 1</td>
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<tr>
<td>MATH 1572</td>
<td>Calculus 2</td>
<td>4</td>
</tr>
<tr>
<td>MATH 2673</td>
<td>Calculus 3</td>
<td>4</td>
</tr>
<tr>
<td>MATH 3720</td>
<td>Linear Algebra and Matrix Theory</td>
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</tr>
</tbody>
</table>

All students must complete a 120 semester hours, 39 hours must be upper-division (courses at the 3700 level or higher). Students intending to apply for PhD programs in economics should consider taking the following:

### COURSE | TITLE | S.H. |
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</thead>
<tbody>
<tr>
<td>ECON 2610</td>
<td>Principles 1: Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 2630</td>
<td>Principles 2: Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 3710</td>
<td>Intermediate Microeconomic Theory</td>
<td>3</td>
</tr>
<tr>
<td>ECON 3712</td>
<td>Intermediate Macroeconomic Theory</td>
<td>3</td>
</tr>
<tr>
<td>ECON 4880</td>
<td>Analysis of Economic Problems</td>
<td>3</td>
</tr>
</tbody>
</table>

### Select one of these Statistics options:

- ECON 3788 Statistics for Business and Economics 1
- ECON 3789 Statistics for Business and Economics 2

Select 12 semester hours of upper-division Economics electives.

### Double major or Minor with Electives to reach 120 hours

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
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</thead>
<tbody>
<tr>
<td>MATH 1552</td>
<td>Applied Mathematics for Management</td>
<td>4</td>
</tr>
</tbody>
</table>

### Note:

This schedule is intended solely to illustrate that it is possible for a "typical" student to complete the BA in Economics in four years. The coursework any individual student needs to take will differ. Specifically, the coursework required will vary depending on the mathematics courses you have already taken when you start the degree. Some students will need to take additional courses prior to taking MATH 1510 College Algebra while other students may have already taken a course in calculus and would not need to take either MATH 1510 College Algebra or MATH 1552 Applied Mathematics for Management. The coursework taken will also depend on a student's career goals. It is extremely important that you meet with an advisor to discuss your career aspirations and which courses you personally will need to take.

### Year 1

#### Spring
- ECON 2610 Principles 1: Microeconomics (fulfills the General Education Social Science requirement) 3
- MATH 1552 Applied Mathematics for Management (Required for major, students intending to pursue graduate work should take MATH 1571) 4

### Year 2

#### Spring
- ECON 3710 Intermediate Microeconomic Theory (Required for major) 3
- Minor (Required for minor) 3
- Minor (Required for minor) 3
- Foreign Language 2600 4
- Arts and Humanities (Gen Ed) 3

#### Fall
- ECON 2630 Principles 2: Macroeconomics (fulfills the General Education Social Science requirement) 3
- Natural Science (Gen Ed) 3
- ECON 3788 or ECON 3789 Statistics for Business and Economics 1 or Statistics for Business and Economics 2 3
- Foreign Language 1550 4

### Year 3

#### Spring
- ECON 37XX or higher (Required for major) 3
- ECON 37XX or higher (Required for major) 3
- Minor 37XX or higher (Required for minor) 3
- Elective 3 3
- Elective 37XX or higher 3

#### Fall
- ECON 3712 Intermediate Macroeconomic Theory (Required for major) 3
- Minor (Required for minor) 3
- Social and Personal Awareness (Gen Ed) 3
- Arts and Humanities (Gen Ed) 3
- Elective 3 2

### Year 4

#### Spring
- Elective 3 3
- Elective 37XX or higher 3
- ECON 37XX or higher (Required for major) 3
- Minor 37XX or higher (Required for minor) 3
- Elective 3 3

#### Fall
- ECON 4880 Analysis of Economic Problems (ECON Capstone) 3
- ECON 37XX or higher (Required for major) 3
Learning Outcomes

To be competitive in the job market, economics majors must have knowledge of microeconomics, macroeconomics, and statistical techniques. They must also be able to apply the theory and statistical techniques they have learned to public policy issues and business problems and be able to present their conclusions. The learning objectives of the economics major are as follows:

Microeconomics

The student will be able to discuss the characteristics of different market structures and how the structure of a market affects consumers. The student will also be able to explain the conditions that must be met for an economy to use its resources in the most efficient manner possible.

Macroeconomics

The student will be able to explain the major macroeconomic goals: rapid economic growth, high employment, and stable prices and how the tools of monetary and fiscal policy can be used to achieve macroeconomic goals.

Statistical Analysis

The student will be able to interpret descriptive statistics, the results of hypothesis tests, and regression estimates.

Communication Skills

The student will be able to give a well-prepared presentation on an economic problem. By well-prepared, it is meant that the presentation clearly frames the topic of the presentation, discusses the relevant theory and evidence, correctly documents references, and proposes a conclusion consistent with the theory and evidence.

"4+1" Bachelor’s/Master’s Program

The accelerated "4+1" program allows students to earn the MA in Economics in one year after completing their bachelor’s degree. Students pursuing the MA in Financial Economics can complete the degree in three semesters. Undergraduate students can apply to take graduate courses after completing 78 semester hours with a GPA of 3.3 or higher. Students can take a maximum of nine semester hours of graduate coursework that can count both toward a bachelor’s degree and either the MA in Economics or the MA in Financial Economics. Students who successfully complete the master’s courses are encouraged to apply for a graduate assistantship.

Qualified students, including students who are not economics majors, can take the courses listed below after having met the following requirements:

- A grade of "A" in ECON 2610 Principles 1: Microeconomics
- A grade of "A" or "B" in MATH 1571 Calculus 1, and MATH 1572 Calculus 2 (in this case ECON 6922 Microeconomic Theory is taken in place of ECON 3710 Intermediate Microeconomic Theory)
- ECON 6939 The Economics of Financial Markets and Institutions –
  - A grade of "A" or "B" in ECON 3712 Intermediate Macroeconomic Theory, and a grade of "A" or "B" in MATH 1552 Applied Mathematics for Management or MATH 1570 Applied Calculus 1 or MATH 1571 Calculus 1
- ECON 6945 Public Finance –
  - A grade of "A" or "B" in ECON 6912 Microeconomic Theory
- ECON 6976 Econometrics –
  - A grade of "A" or "B" in ECON 6904 Quantitative Methods for Economics; OR
  - A grade of "A" in ECON 3790 or STAT 3743 Probability and Statistics, and a grade of "A" in MATH 1552 Applied Mathematics for Management or MATH 1570 Applied Calculus 1 or MATH 1571 Calculus 1

Minor in Economics

An economics minor complements many different majors. Students taking a minor in economics must meet the requirements of one of the following tracks:

- Economics
- Economics with Statistics

Courses at the 1500-level cannot be counted toward the minor. ECON 3790 cannot be counted as an elective in this track.

Economics Track

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
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<tbody>
<tr>
<td>ECON 2610</td>
<td>Principles 1: Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 2630</td>
<td>Principles 2: Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>12 semester hours of upper-division economics electives other than ECON 3790</td>
<td>12</td>
<td></td>
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</table>

Total Semester Hours 18

Minor in Economics with Statistics

An economics minor complements many different majors. Students taking a minor in economics must meet the requirements of one of the following tracks:

- Economics
- Economics with Statistics

Courses at the 1500-level cannot be counted toward the minor.

Economics with Statistics

<table>
<thead>
<tr>
<th>COURSE</th>
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<tbody>
<tr>
<td>ECON 2610</td>
<td>Principles 1: Microeconomics</td>
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<tr>
<td>ECON 2630</td>
<td>Principles 2: Macroeconomics</td>
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<tr>
<td>ECON 3790</td>
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<tr>
<td>9 semester hours of electives in economics at the 3700-level or higher</td>
<td>9</td>
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</table>

Total Semester Hours 20
Bachelor of Science in Business Administration in Business Economics

Ou Hu, Chair
(330) 941-2061

The Williamson College of Business Administration in cooperation with the Department of Economics in the College of Liberal Arts and Social Sciences offers a Bachelor of Science in Business Administration degree with a major in Business Economics.

Economics provides critical decision-making tools in all areas of business. To the manager of a firm, microeconomics theory provides strategies on how to maximize profit, techniques for measuring how customers will respond to changes in price, and how the potential profitability of the firm will vary with the level of competition. Macroeconomics theory discusses why inflation, unemployment, and interest rates change. For a manager, an important issue is how the federal government may try to change the state of the economy and how that will alter business opportunities.

Business Economics majors at Youngstown State University take courses in intermediate microeconomic theory, intermediate macroeconomic theory and complete a capstone project involving analysis. Business economics majors also take four upper division electives that introduce them to different specializations, such as international trade, money and banking, public finance, and labor markets.

JOB OPPORTUNITIES

The Business Economics major prepares students for careers in corporate, government, and the nonprofit fields. Employers are looking for individuals with an understanding of the global economy and its connection to organizations, individuals and society. Business economists work for major corporations, investment firms and government agencies, gathering and analyzing critical information that can be used to react to fluctuating markets and business cycles. The job outlook for business economics is expected to grow due to the driven need for quantitative methods to analyze and forecast business, sales and other economic trends.

STUDENT EXPERIENCES

Business Economics majors at Youngstown State University have the opportunity to build their knowledge and leadership skills in their field through various student leadership organizations such as Actuarial Science Club, Economics Club, Beta Gamma Sigma, Enactus, and the Student Investment Fund.

4+1 Bachelor/Master Program

The accelerated “4+1” program allows students to earn the MA in Economics in one year after completing their bachelor’s degree. Students pursuing the MA in Financial Economics can complete the degree in three semesters. Undergraduate students can apply to take graduate courses after completing 78 semester hours with a GPA of 3.3 or higher. Students can take a maximum of nine semester hours of graduate coursework that can count both toward a bachelor’s degree and either the MA in Economics or the MA in Financial Economics. Students who successfully complete the master's courses are encouraged to apply for a graduate assistantship.

4 + 1 Bachelor/Master Program.

For more information, visit Business Economics (http://www.ysu.edu/academics/college-liberal-arts-social-sciences/economics-major/).

<table>
<thead>
<tr>
<th>COURSE</th>
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<tr>
<td>YSU 1500</td>
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<td>or SS 1500</td>
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<tr>
<td>or HONR 1500</td>
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<td><strong>GENERAL EDUCATION COURSES</strong></td>
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<tr>
<td>ENGL 1550 Writing 1</td>
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<tr>
<td>or ENGL 1549 Writing 1 with Support</td>
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<tr>
<td>ENGL 1551 Writing 2</td>
<td>3</td>
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<tr>
<td>CMST 1545 Communication Foundations</td>
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<tr>
<td>Mathematics requirement Met through MATH 1552 (see Business Tool)</td>
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<tr>
<td>Arts and Humanities (1 course)</td>
<td>3 SH met through PHIL 2628 - required course for major</td>
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<tr>
<td>PHIL 2628 Business Ethics (required for major)</td>
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<tr>
<td>Natural Sciences (2 courses, 1 with lab) (7 s.h.)</td>
<td>7</td>
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<tr>
<td>Social Science (2 courses) Met through ECON 2610 &amp; ECON 2630 (See Business Tool)</td>
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<tr>
<td>Social and Personal Awareness (2 courses)</td>
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<tr>
<td><strong>BUSINESS TOOL COURSES</strong></td>
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</tr>
<tr>
<td>Business Tool courses must be completed with the grade of a &quot;C&quot; or higher and cannot be taken credit/no credit.</td>
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<tr>
<td>BUS 1500 Exploring Business</td>
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<tr>
<td>BUS 2600 Business Applications of Microsoft Excel</td>
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<tr>
<td>MATH 1552 Applied Mathematics for Management Students</td>
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<tr>
<td>ECON 2610 Principles 1: Microeconomics</td>
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<tr>
<td>ECON 2630 Principles 2: Macroeconomics</td>
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<tr>
<td>MGT 2604 Legal Environment of Business 1</td>
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<tr>
<td>ACCT 2602 Financial Accounting</td>
<td>3</td>
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<tr>
<td>ACCT 2603 Managerial Accounting</td>
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<tr>
<td>ENGL 3742 Business Writing</td>
<td>3</td>
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<tr>
<td>ECON 3788 Statistics for Business and Economics 1</td>
<td>3</td>
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<tr>
<td><strong>BUSINESS CORE COURSES</strong></td>
<td></td>
</tr>
<tr>
<td>To enroll in upper level business courses student must have successfully completed ENGL 1549 or 1550, ENGL 1551, PHIL 2628, CMST 1545, all Business Tool course AND have a minimum 2.5 overall GPA. Upper level business courses must be completed with the grade of a &quot;C&quot; or higher and cannot be taken credit/no credit.</td>
<td></td>
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<tr>
<td>BUS 3715 Principles of International Business</td>
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<tr>
<td>BUS 3700 Business Analytics</td>
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<tr>
<td>FIN 3720 Business Finance</td>
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<td>MKTG 3702 Business Professionalism</td>
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<td>MKTG 3703 Marketing Concepts and Practice</td>
<td>3</td>
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<tr>
<td>MGT 3725 Fundamentals of Management</td>
<td>3</td>
</tr>
<tr>
<td>MGT 3761 Management Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>MGT 3789 Operations Management</td>
<td>3</td>
</tr>
<tr>
<td>MGT 4850 Strategic Management and Leadership</td>
<td>3</td>
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<tr>
<td><strong>ECONOMICS MAJOR REQUIREMENTS</strong></td>
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<tr>
<td>ECON 3710 Intermediate Microeconomic Theory spring term only</td>
<td>3</td>
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<tr>
<td>ECON 3712 Intermediate Macroeconomic Theory fall term only</td>
<td>3</td>
</tr>
<tr>
<td>ECON 4880 Analysis of Economic Problems</td>
<td>3</td>
</tr>
<tr>
<td><strong>ECONOMICS UPPER LEVEL COURSES</strong></td>
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<tr>
<td>Select 12 SH of ECON upper level courses.</td>
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<tr>
<td><strong>BUSINESS UPPER LEVEL COURSES</strong></td>
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<tr>
<td>Select 6 SH of upper level business courses (ACCT, ADV, BUS, ENT, FIN, MGT, MKTG)</td>
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<tr>
<td><strong>NON-BUSINESS ELECTIVES</strong></td>
<td>8</td>
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<tr>
<td><strong>Total Semester Hours</strong></td>
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</tbody>
</table>
### Department of Management and Marketing

#### Welcome from the Chair

Greetings from the Department of Management and Marketing. Our goal is to provide our students with an applied education that will prepare them for success upon graduation. We do this through real-world class projects, professional skills, and certifications such as Adobe Suite, Google Analytics, Excel, etc., active student organizations, and paid, for-credit internships. Our faculty members have extensive experience in the business world that enables them to provide our students with knowledge and skills that go beyond the traditional classroom.

Whether you're interested in advertising, sales, international business, human resource management, management information systems, entrepreneurship, managing a non-profit organization, or business administration, we have the program to fit your needs.

If you have any questions or would like to visit the Williamson College of Business Administration, please contact me any time.

Dr. Bruce Keillor  
Management & Marketing Department Chair  
bdkkeillor@ysu.edu  
(330) 941-1894

#### Management

(330) 941-3080

To succeed in today's ever-changing business world, organizations are constantly seeking employees who can solve complex problems, make savvy decisions, and lead others. As a management major, you will develop capabilities essential to becoming a manager who can do just that! You will have opportunities to develop a broad set of valuable skills essential to motivating employees, managing processes, managing information,
and thinking strategically. As a management major, you will be able to
demonstrate your qualification for a well-paid management position in a range
of industries by building knowledge pertaining to general management, human
resources management, management information systems, or supply chain
management.

Learning Outcomes
The student learning outcomes for majors within the Management Department
are as follows:

- **Operations Management**—Demonstrate knowledge in role of operations
  management in business strategy of the firm; interdependence with other
  key functional areas; designing and improving processes; designing and
  operating value chains
- **International Business**—Demonstrate knowledge in cross-country
  variations in business environments that present both opportunities and
  challenges in operating globally; strategies and management systems to
  seize the opportunities and face the challenges in operating globally
- **Information Systems**—Demonstrate knowledge in role of information
  systems in the modern enterprise; emerging technologies (such as ERP,
  CRM etc.) and their potential impact on your business; managing IT
  resources effectively and efficiently to achieve business goals
- **Business Policy and Strategy**—Demonstrate knowledge in applying basic
  strategy frameworks, concepts, and definitions; cross-functional analysis,
  decision-making, and strategic integration; analysis of complex business/
  industry scenarios and development of action plans
- **Management/Organizational Behavior**—Demonstrate knowledge in
  management as a social process; managerial functions (planning,
  organizing, leading, motivating etc.) and skills (technical, communications,
  etc.)

For more information, visit the Williamson College of Business Administration
(https://ysu.edu/academics/williamson-college-business-administration/).

**Professor**

Rebecca Lee Badawy, Ph.D., Associate Professor
Patrick J. Bateman, Ph.D., Professor
Ramesh Dangol, Ph.D., Associate Professor
Rangamohan V. Eunni, D.B.A., Professor
Guohong (Helen) Han-Haas, Ph.D., Professor
Deepa Gopal Iyer, Ph.D., Assistant Professor
Birsen Karpak, D.B.A., Professor
Betty Jo Licata, Ph.D., Professor
Brien N. Smith, Ph.D., Professor
William G. Vendemia, Ph.D., Professor

**Lecturer**

Kimberly Pleva, M.B.A., Lecturer
Frank G. Sole, M.B.A., Senior Lecturer

**Majors**

- Management (p. 571)
- Human Resource Management (p. 569)
- Business Administration (p. 567)

**Minors**

- Employee Relations Minor (p. 568)
- Management Information Systems Minor (p. 573)
- Management Minor (p. 573)

**Certificates**

- Leadership Certificate (p. 571)

**MGT 2604 Legal Environment of Business 1 3 s.h.**

Various sources of laws, basic legal reasoning and application. Emphasis
on basic legal concepts of contracts, labor, tax, antitrust and business
organizations, and their relationship to business and society.

**MGT 3705 Fundamentals of Occupational Safety 3 s.h.**

Overview of the broad concepts of occupational safety and health that provide
a proper foundation for understanding the basic principles of workplace
safety and health programs. Analysis of the regulatory environment including
OSHA and Workers’ Compensation; the development of safety management
programs; the evaluation of workplace hazards; and discussion of the
economic, political, and societal implications involving workplace safety and
health.

Prereq.: MGT 1510 or ENST 2600 or CIFS 1500 or BUS 1500 or consent of
instructor and 2.50 overall gpa.

**MGT 3714 Legal Environment of Business 2 3 s.h.**

In-depth analysis of commercial law areas covered on the CPA exam,
with emphasis on sales, secured transactions, real and personal property,
insurance, bankruptcy, and commercial paper.

Prereq.: MGT 2604, junior standing and 2.5 overall gpa.

**MGT 3715 Employee Relations and Workplace Ethics 3 s.h.**

Examines the current legal and social issues that affect employee relations.
This course explores ways to effectively manage the workforce, while
practicing ethically responsible behaviors. A survey of laws and regulations
that affect the workplace and business negotiations are examined. Prereq./
Coreq.: MGT 3725 and 2.5 GPA or permission of Department Chair and 2.5
GPA.

**MGT 3725 Fundamentals of Management 3 s.h.**

Emphasizes the basic principles of management rather than those involved in
business organization. The nature of managerial action within an organization,
formal and informal structure, process of making decisions, and interrelated
activities in management.

Prereq.: 2.5 GPA and junior standing.

**MGT 3750 Managing Individuals in Organizations 3 s.h.**

Study of the contributions of the fields of organizational behavior and human
resources as they apply to organizational functionality. Topics include
individual and group decision-making, motivation, perceptions, and attitudes
as they impact human resource processes, including job design, selection,
organizational development, total rewards, employee relations, and workplace
health, safety, and security.

Prereq.: MGT 3725 or concurrent and 2.5 overall gpa.

**MGT 3755 Managing Workplace Diversity 3 s.h.**

Current topics in diversity: national and international demographics of the
changing face of the work force; processes that create diversity including the
organization of work; managing differences in work settings; management
responses to diversity; and connections to larger institutional dynamics.
Prereq./Coreq.: MGT 3725 and 2.5 GPA or permission of Department Chair and
2.5 GPA.

**MGT 3761 Management Information Systems 3 s.h.**

Study of information systems and their interaction with individuals and
organizations, providing a basic understanding of hardware, software, and
computer technology used in information systems.

Prereq.: 2.5 GPA and junior standing.
MGT 3771  Social Media and E-Commerce  3 s.h.
Technologies available to organizations to reach customers, sell products, and create business values that continue to change and emerge. The course provides students with an understanding of social media and e-commerce technologies from a business/managerial perspective. Underlying issues surrounding the technologies, their development, and utilization of web-based initiatives are studied.
Prereq.: 2.5 GPA and MGT 3761 or concurrent.

MGT 3789  Operations Management  3 s.h.
Study of current operations management theories and practices with emphasis on direction, planning, and control of production systems. Includes detailed analysis in such areas as materials management, work measurement, quality control, scheduling, maintenance, and forecasting.
Prereq.: MGT 3725, ECON 3790 or ECON 3788, ACCT 2603L or BUS 2600, and 2.5 overall gpa.

MGT 4801  Leadership in Business and Society  3 s.h.
Leadership accounts for a significant part of the performance in business, nonprofit organizations and government agencies. This course provides a broad understanding of leadership as phenomenon and its impact on the behavior of individuals in organizations and firm performance.
Prereq.: MGT 3725 and 2.5 GPA.

MGT 4810  Compensation and Performance Appraisal  4 s.h.
Design and administration of compensation systems. Topics: pay equity, job evaluation, wage and salary structure, merit and incentive programs, benefits packages and compensation legislation. Emphasis on the role of performance appraisal in administration decision making.
Prereq.: MGT 3725 and MGT 3750 and 2.5 overall gpa.

MGT 4819  Selection, Training, and Development  4 s.h.
Intensive analysis of programs for personnel acquisition, the training and development of employees. Includes the human resources planning process. Examination of federal and other employment legislation where applicable.
Prereq.: MGT 3725 and MGT 3750 and 2.5 overall gpa.

MGT 4820  Supply Chain Management  3 s.h.
A comprehensive description of supply chain management practices and principles to achieve a competitive advantage in a global society and integrating these principles as a core competency in enterprise strategy. Topics include logistics, technology (information networks, ERP, SAP, operations (inventory management, transportation, warehousing, and material handling) and network designs.
Prereq.: MGT 3789 and 2.5 overall gpa.

MGT 4821  Business Process Integration  3 s.h.
This course examines the forces driving enterprise integration as well as the management decisions associated with the design and implementation of enterprise systems. Students successfully completing this course will have thorough understanding of enterprise integration as well as practical experience of configuring and using SAP.
Prereq.: MGT 3761 or ACCT 3709 and 2.5 GPA.

MGT 4844  Strategic Human Resource Management  3 s.h.
Capstone course of the human resource (HR) major and should be taken in students’ last semester. Purpose is to integrate knowledge within HR and across disciplines in developing and implementing HR strategy. Special focus will be given to developing the proficiencies necessary to serve as an HR consultant, especially in quantifying the impact of HR practices. Must take concurrently with MGT 4845.
Prereq.: MGT 4810 or MGT 4819 or consent of instructor and 2.5 overall gpa.

MGT 4845  Projects in Human Resource Management  1 s.h.
Emphasizes experiential, practical application of knowledge to real-life human resource challenges.
Prereq.: MGT 4810 or MGT 4819 or consent of instructor and 2.5 overall gpa.
Coreq.: MGT 4844.

MGT 4850  Strategic Management and Leadership  3 s.h.
Analysis of problems and issues faced by organizations operating in today’s dynamic environment interspersed with multiple stakeholders. Students integrate concepts and techniques learned from a range of disciplines and apply them to all levels of firms functioning in a wide variety of industries.
Prereq.: MGT 3725, MKTG 3703, FIN 3720 and 2.5 overall gpa.
Gen Ed: Capstone.

MGT 4880  Special Topics in Management  1-4 s.h.
Subject matter, credit hours, and specific prerequisites to be announced in advance of each offering.
Prereq.: Senior standing in MGT or permission of instructor.

MGT 4881  Project and Quality Management  3 s.h.
Study of project management topics regarding project planning, work breakdown structure, scheduling, PERT/CPM, controlling and managing the costs, resource allocation, project control, and project termination. Includes the environment in which project managers work and its organizational structures: functional, project, and matrix organizations. Computer-based project management software is also introduced.
Prereq.: MGT 3761 and 2.5 GPA.

MGT 4895  Management Internship  3 s.h.
Offers the student the opportunity to relate theory to practice through on-the-job work experience with participating organization. Mandatory bi-weekly meetings with faculty advisor to insure maximum learning from the experience. Offered all three semesters each year based on the availability of internships. A written evaluation of the job experience is required.
Prereq.: 20 s.h. of MGT courses including MGT 3725 and MGT 3750, and department screening and approval.

MGT 4896  Logistics Internship  3 s.h.
Work and study in the public or private sector centered upon the development of a significant logistics project under the direction of university faculty and designated member(s) of the participating agency. Intended for students in the logistics minor.
Prereq.: MGT 4882 or completion of 12 s.h. in the minor.

MGT 4899  Independent Study  1-3 s.h.
Development of a special topic of interest to the student under the direct supervision of a management faculty member. Credit hours vary according to the nature of the project.
Prereq.: MGT core and permission of department chairperson.

MGT 5835  Systems Analysis and Design  3 s.h.
Information systems and system development life cycle (SDLC) sizing tools and techniques used to document an information system.
Prereq.: MGT 3761 AND 2.5 GPA.

MGT 5845  Work in America  3 s.h.
Examines the changing characteristics, expectations, and representations of work in America. Includes the exploration of demographic, historic, economic, technological, sociological, religious, ethical, popular, and poetic perspectives on work.
Prereq.: MGT 3715 or Junior standing and 6 s.h. of GER approved SI courses.

MGT 5865  Database Management Systems  3 s.h.
Design and management of organizational data resources. Database issues include design, definition, creation, documentation update, maintenance, revision, selection, acquisition, and use. The implementation of the hierarchical, network, and relational models with emphasis on business applications.
Prereq.: MGT 3761 and 2.5 GPA.
Bachelor of Science in Business Administration in Business Administration

Business Administration

Business Administration is a broad business aspect of the management of a company, division of a company, department, or other entity within the organization. Business management is carried out through four main aspects: planning, organizing, leading, and controlling. Strong communication skills and critical thinking are very important in the field of business administration. Duties of a business administrator include working in groups with professionals from various backgrounds from within and outside the company to develop and achieve company goals.

Business Administration majors at Youngstown State University take courses in management, accounting, finance, and marketing. Specialization areas include enterprise resource planning, management information systems, human resource management, international business, and entrepreneurship.

career opportunities

Business Administration is a wide field that incorporates a variety of occupations, especially in the area of management, supervision, and leadership. Managers are needed in all aspects of the workforce including corporations, small businesses, healthcare, facilities, government, and nonprofit organizations.

student experiences

Business Administration majors at Youngstown State University have the opportunity to build their leadership skills through various WCB student organizations. (http://www.ysu.edu/academics/williamson-college-business-administration/student-organizations-and-experiences/)

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
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<tbody>
<tr>
<td>FIRST YEAR REQUIREMENT - STUDENT SUCCESS SEMINAR</td>
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<tr>
<td>YSU 1500</td>
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<tr>
<td>or SS 1500</td>
<td>or Honors Seminar</td>
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<td>or HONR 1500</td>
<td>or Honors Seminar</td>
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<tr>
<td>GENERAL EDUCATION</td>
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</tr>
<tr>
<td>ENGL 1550</td>
<td>Writing 1</td>
<td>3-4</td>
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<tr>
<td>or ENGL 1549</td>
<td>Writing 1 with Support</td>
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<tr>
<td>ENGL 1551</td>
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<tr>
<td>Mathematics requirement Met through MATH 1552 - See Business Tool Courses</td>
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<tr>
<td>Arts and Humanities (6 s.h.) 3 SH of Arts &amp; Humanities met through PHIL 2628 Business Ethics</td>
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<tr>
<td>PHIL 2628</td>
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<tr>
<td>Natural Sciences (2 courses, 1 with lab) (7 s.h.)</td>
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<tr>
<td>Social and Personal Awareness (6 s.h.)</td>
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<tr>
<td>Social Science (6 s.h.) Met through ECON 2610 and ECON 2630 - See Business Tool Courses</td>
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<tr>
<td>BUS 2600</td>
<td>Business Applications of Microsoft Excel</td>
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<td>MATH 1552</td>
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<td>ECON 2630</td>
<td>Principles 2: Macroeconomics</td>
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<td>ECON 3788</td>
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<td>BUSINESS CORE REQUIREMENTS</td>
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<td>To enroll in upper level business courses students must have successfully completed ENGL 1549 or 1550, ENGL 1551, PHIL 2628, CMST 1545, all Business Tool courses AND have a minimum 2.5 overall GPA.</td>
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<tr>
<td>BUS 3700</td>
<td>Business Analytics</td>
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<td>BUS 3715</td>
<td>Principles of International Business</td>
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<td>MKTG 3702</td>
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<td>MKTG 3703</td>
<td>Marketing Concepts and Practice</td>
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<td>MGT 3761</td>
<td>Management Information Systems</td>
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<td>MGT 3789</td>
<td>Operations Management</td>
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<td>MGT 4850</td>
<td>Strategic Management and Leadership</td>
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<td>MGT 3750</td>
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<td>Upper level MGT course</td>
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<td>Upper Level MKTG or ADV course</td>
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Upper Level Business Series (students must select 2 course (6 SH) from one area.)

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<td>Enterprise Resource Planning</td>
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<td>MGT 4820</td>
<td>Supply Chain Management</td>
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<td>MGT 4821</td>
<td>Business Process Integration</td>
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<td>Management Information Systems</td>
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<td>MGT 3771</td>
<td>Social Media and E-Commerce</td>
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<td>MGT 5835</td>
<td>Systems Analysis and Design</td>
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<td>MGT 5865</td>
<td>Database Management Systems</td>
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<td>Human Resource Management</td>
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<td>MGT 3715</td>
<td>Employee Relations and Workplace Ethics</td>
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<td>Fundamentals of Occupational Safety</td>
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<td>MGT 3755</td>
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<td>International Business</td>
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<td>BUS 4860</td>
<td>International Business Internship</td>
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<td>BUS 4875</td>
<td>International Business Field Study Tour</td>
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<td>International Accounting and Finance</td>
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<td>International Marketing</td>
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<td>MKTG 4849</td>
<td>Export Strategy</td>
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<td>MKTG 4851</td>
<td>Services Marketing</td>
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<td>ENT 3700</td>
<td>Entrepreneurship New Venture Creation</td>
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<td>Year 1</td>
<td>Fall</td>
<td>Semester Hours</td>
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<td>YSU 1500 or SS 1500</td>
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<td>BUS 1500 Exploring Business</td>
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<td>ENGL 1550 Writing 1 or ENGL 1549 Writing 1 with Support</td>
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<td>MATH 1552 Applied Mathematics for Management</td>
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<td>CMST 1545 Communication Foundations</td>
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<td></td>
<td>GE: Social &amp; Personal Awareness Courses</td>
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<td>PHIL 2628 Business Ethics</td>
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<td>ENGL 3742 Business Writing</td>
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<td></td>
<td>ECON 2630 Principles 2: Microeconomics</td>
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<tr>
<td></td>
<td>GE: Social &amp; Personal Awareness</td>
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<td></td>
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<td><strong>TOTAL SEMESTER HOURS</strong></td>
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<th>Semester Hours</th>
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<tr>
<td></td>
<td>MGT 3761 Management Information Systems</td>
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<td></td>
<td>FIN 3720 Business Finance</td>
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<tr>
<td></td>
<td>BUS 3715 Principles of International Business</td>
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<tr>
<td></td>
<td>MKTG upper level course</td>
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<td></td>
<td>Upper Level Business Course Internship Recommended</td>
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<td></td>
<td><strong>TOTAL SEMESTER HOURS</strong></td>
<td><strong>15</strong></td>
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</table>

Learning Outcomes

The student learning outcomes for majors within the Management Department are as follows:

- **Operations Management**—Demonstrate knowledge in role of operations management in business strategy of the firm; interdependence with other key functional areas; designing and improving processes; designing and operating value chains.
- **International Business**—Demonstrate knowledge in cross-country variations in business environments that present both opportunities and challenges in operating globally; strategies and management systems to seize the opportunities and face the challenges in operating globally.
- **Information Systems**—Demonstrate knowledge in role of information systems in the modern enterprise; emerging technologies (such as ERP, CRM etc.) and their potential impact on your business; managing IT resources effectively and efficiently to achieve business goals.
- **Business Policy and Strategy**—Demonstrate knowledge in applying business policy frameworks, concepts, and definitions; cross-functional analysis, decision-making, and strategic integration; analysis of complex business/industry scenarios and development of action plans.
- **Management/Organizational Behavior**—Demonstrate knowledge in management as a social process; managerial functions (planning, organizing, leading, motivating etc.) and skills (technical, communications, etc.).

**Minor in Employee Relations**

Youngstown State University students are invited to enhance their educational experience with a minor in Employee Relations. Employee Relations involves the body of work concerned with maintaining employer-employee relationships that contribute to satisfactory productivity, motivation, and morale. Essentially, Employee Relations is concerned with preventing and resolving problems.
involving individuals, which arise out of or affect work situations. The minor in Employee Relations can be met by completing the following requirements:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
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</thead>
<tbody>
<tr>
<td>BUS 1500</td>
<td>Exploring Business</td>
<td>3</td>
</tr>
<tr>
<td>MGT 3725</td>
<td>Fundamentals of Management</td>
<td>3</td>
</tr>
<tr>
<td>MGT 3750</td>
<td>Managing Individuals in Organizations</td>
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<tr>
<td>Select two of the following:</td>
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<tr>
<td>MGT 3705</td>
<td>Fundamentals of Occupational Safety</td>
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<tr>
<td>MGT 3715</td>
<td>Employee Relations and Workplace Ethics</td>
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<tr>
<td>MGT 3755</td>
<td>Managing Workplace Diversity</td>
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<tr>
<td>Select one of the following:</td>
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<td>3-4</td>
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<tr>
<td>MGT 3761</td>
<td>Management Information Systems</td>
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</tr>
<tr>
<td>MGT 4801</td>
<td>Leadership in Business and Society</td>
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<tr>
<td>MGT 4810</td>
<td>Compensation and Performance Appraisal</td>
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</tr>
<tr>
<td>MGT 4819</td>
<td>Selection, Training, and Development</td>
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</table>

Total Semester Hours 18-19

If any of the above courses are part of the student’s major an alternate course needs to be substituted. Students interested in declaring a minor in Employee Relations need to complete an Intra University Transfer Request form with their academic advisor. Students must meet all course prerequisites to enroll in WCBA courses, including a minimum 2.5 overall GPA for upper level business courses. WCBA courses must be completed with the grade of a “C” or higher and cannot be taken credit/no credit.

Certificate in Enterprise Resource Planning (ERP)

Contact: Birsen Karpak, D.B.A.
bkarpak@ysu.edu

Enterprise Integration involves the integration of software, hardware, and networking technology at both the intra-organizational and inter-organizational levels. To be successful, management must implement a business process view of the organization. The ERP Certificate enables students to be effective users of integrated ERP software and effective participants in managing the evaluation, installation, and use of ERP software.

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
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<tbody>
<tr>
<td>MGT 3761</td>
<td>Management Information Systems</td>
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<tr>
<td>or ACCT 3709</td>
<td>Accounting Information Systems</td>
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<tr>
<td>MGT 3789</td>
<td>Operations Management</td>
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<tr>
<td>MGT 4821</td>
<td>Business Process Integration</td>
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<tr>
<td>MGT 4820</td>
<td>Supply Chain Management</td>
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</table>

Total Semester Hours 12

Students interested in declaring an ERP certificate need to complete an Intra University Transfer Request form with their academic advisor. Students must meet course prerequisites to be eligible to enroll in WCBA courses, including a minimum 2.5 overall GPA for upper level business courses. WCBA courses must be completed with the grade of a “C” or higher and cannot be taken credit/no credit.

Learning Outcomes

- Would acquire the knowledge and skills needed for careers in organizations that employ ERP systems to support key business processes.
- Would receive an applied enterprise systems educational experience and hands-on practice in SAP.
- Would be able to configure an ERP system and apply it to support integrated business processes.
- Would successfully integrate logistics, operations and procurement management.

Bachelor of Science in Business Administration in Human Resource Management

Human Resource Management (HRM) professionals provide leadership for ensuring that organizations recruit, retain and develop the best employees. People are an organization’s most valuable asset and HR professionals play a key role ensuring organizations have the best people. HR will be especially attractive to those students who like working with a broad range of people and have excellent communication and negotiating skills. HR professionals can be specialists who work in one area of HR or generalists who work in multiple areas. Key HR areas include recruitment and selection, training and development, compensation and benefits, and employee relations.

The Society for Human Resource Management (SHRM) is the world's largest membership organization for HR professionals. The HR curriculum at YSU has been reviewed by SHRM and has been approved as aligned with SHRM’s HR Curriculum Guidelines.

CAREER OPPORTUNITIES

Human Resource managers are employed in every industry. The field of Human Resources offers an array of potential career options including recruiters, placement managers, trainers, compensation analysts, compensation and benefits manager, employee relations managers, and safety coordinators. Executive level positions include Vice President of HR, Chief HR Officer, and Executive Vice President.

STUDENT EXPERIENCES

Human Resource Management majors at Youngstown State University have the opportunity to build their leadership skills through various WCBA student organizations (http://www.ysu.edu/academics/williamson-college-business-administration/student-organizations-and-experiences/). HR majors should plan to join the student chapter of the Society for Human Resource Management. Since the HR curriculum has been approved by SHRM, HR majors who are in their senior year and who meet the eligibility requirements may apply to take the SHRM Certified Professional (SHRM-CP) exam.

All business majors are strongly encouraged to complete internships. Internships are career-related work experiences that enable students to apply their knowledge and skills in an organizational setting. In the WCBA, internships that are approved for academic credit must be paid. Completing a career-related internship increases a student’s job opportunities upon graduation.

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<tr>
<th>COURSE</th>
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<td>or SS 1500</td>
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<td>or HONR 1500</td>
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GENERAL EDUCATION

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<td>or ENGL 1549</td>
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<td>ENGL 1551</td>
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<td>Arts and Humanities (6 s.h.)</td>
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<td>PHIL 2628</td>
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### Bachelor of Science in Business Administration in Human Resource Management

#### Suggested Four-Year Plan

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<th>Courses</th>
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<td>MGT 2604: Legal Environment of Business 1</td>
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<td></td>
<td>Fall</td>
<td>MGT 3789: Business Writing</td>
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<td>ECON 3788: Statistics for Business and Economics 1</td>
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<td>2</td>
<td>Summer</td>
<td>BUS 2600: Legal Environment of Business 1</td>
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<td>ENGL 3742: Business Writing</td>
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<td>ECON 3788: Statistics for Business and Economics 1</td>
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<td>Spring</td>
<td>MGT 3750: Managerial Accounting</td>
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<td>MGT 3761: Management Information Systems</td>
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<td></td>
<td>Fall</td>
<td>MGT 3715: Employee Relations and Workplace Ethics</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MGT 3750: Managing Individuals in Organizations</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MGT 4810: Compensation and Performance Appraisal</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MGT 4819: Selection, Training, and Development</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MGT 4850: Strategic Management and Leadership</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MGT Upper Level Course</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Non-Business Course</td>
<td>3</td>
</tr>
</tbody>
</table>

### BSBA in Human Resource Management

#### Business Tool Courses

Business tool courses must be completed with the grade of a "C" or higher and cannot be taken credit/no credit.

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGT 2604</td>
<td>Legal Environment of Business 1</td>
</tr>
<tr>
<td>ENGL 1551</td>
<td>Writing 2</td>
</tr>
</tbody>
</table>

#### Business Core Courses

To enroll in upper level business courses students must have successfully completed ENGL 1549 or 1550, ENGL 1551, PHIL 2628, CMST 1545, all Business Tool courses AND have a minimum 2.5 overall GPA.

Upper level business courses must be completed with the grade of a "C" or higher and cannot be taken credit/no credit.

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 3700</td>
<td>Exploring Business</td>
</tr>
<tr>
<td>ACCT 2603</td>
<td>Managerial Accounting</td>
</tr>
<tr>
<td>MKTG 3702</td>
<td>Business Professionalism</td>
</tr>
<tr>
<td>ECON 3788</td>
<td>Statistics for Business and Economics 1</td>
</tr>
<tr>
<td>MGT 3725</td>
<td>Fundamentals of Management</td>
</tr>
<tr>
<td>GE: Lab Science</td>
<td></td>
</tr>
</tbody>
</table>

#### Human Resource Management Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGT 3715</td>
<td>Employee Relations and Workplace Ethics</td>
</tr>
<tr>
<td>MGT 3750</td>
<td>Managing Individuals in Organizations</td>
</tr>
<tr>
<td>MGT 4810</td>
<td>Compensation and Performance Appraisal</td>
</tr>
<tr>
<td>MGT 3789</td>
<td>Operations Management</td>
</tr>
</tbody>
</table>

#### Human Resource Upper Level Course

Select one of the following: MGT 3705, MGT 3755, MGT 4801, MGT 4895 or MGT 4899 (Internship Recommended)

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGT 3705</td>
<td>Employee Relations and Workplace Ethics</td>
</tr>
<tr>
<td>MGT 3755</td>
<td>Managing Individuals in Organizations</td>
</tr>
<tr>
<td>MGT 4801</td>
<td>Compensation and Performance Appraisal</td>
</tr>
<tr>
<td>MGT 4899</td>
<td>Internship Recommended</td>
</tr>
</tbody>
</table>

#### Management Upper Level Courses

Select 6 SH of upper level MGT courses.

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGT 3705</td>
<td>Employee Relations and Workplace Ethics</td>
</tr>
<tr>
<td>MGT 3755</td>
<td>Managing Individuals in Organizations</td>
</tr>
<tr>
<td>MGT 4801</td>
<td>Compensation and Performance Appraisal</td>
</tr>
<tr>
<td>MGT 4899</td>
<td>Internship Recommended</td>
</tr>
</tbody>
</table>

#### Business Upper Level Courses

Select 3 SH of upper level business courses (ACCT, ADV, BUS, ENT, FIN, MGT, MKTG).

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 2603</td>
<td>Managerial Accounting</td>
</tr>
<tr>
<td>MKTG 3702</td>
<td>Business Professionalism</td>
</tr>
<tr>
<td>ECON 3788</td>
<td>Statistics for Business and Economics 1</td>
</tr>
<tr>
<td>MGT 3725</td>
<td>Fundamentals of Management</td>
</tr>
<tr>
<td>GE: Lab Science</td>
<td></td>
</tr>
<tr>
<td>MGT 3789</td>
<td>Operations Management</td>
</tr>
</tbody>
</table>

#### Non-Business Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGT 4844</td>
<td>Strategic Human Resource Management and Projects in Human Resource Management (MGT 4844 (spring term only))</td>
</tr>
<tr>
<td>MGT 4850</td>
<td>Strategic Management and Leadership</td>
</tr>
<tr>
<td>MGT Upper Level Course</td>
<td></td>
</tr>
<tr>
<td>Non-Business Course</td>
<td></td>
</tr>
</tbody>
</table>

Total Semester Hours: 120-122
Learning Outcomes
Students will be able to:

- Identification and knowledge of HR functions.
- Understanding of employment and labor law.
- Creation of training plan.
- Ability to identify and critique selection methods.
- Ability to create a job and pay structure within an organization.
- Ensure HR practices are consistent with strategic goals of the organization & other HR functions

Certificate in Leadership
Contact: Helen Han-Haas, Ph.D.
ghan@ysu.edu

The Certificate in Leadership provides YSU students with a broad understanding of leadership as a phenomenon and its impact on the organizational behavior of individuals and firm performance. The following courses are required:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGT 3725</td>
<td>Fundamentals of Management</td>
<td>3</td>
</tr>
<tr>
<td>MGT 4801</td>
<td>Leadership in Business and Society</td>
<td>3</td>
</tr>
<tr>
<td>MGT 3715</td>
<td>Employee Relations and Workplace Ethics</td>
<td>3</td>
</tr>
<tr>
<td>MGT 3755</td>
<td>Managing Workplace Diversity</td>
<td>3</td>
</tr>
</tbody>
</table>

Students interested in declaring a certificate in Leadership need to complete an Intra University Request form with their Academic Advisor. Students must meet all course prerequisites to enroll in WCBA courses, including a minimum 2.5 overall GPA for upper level business courses. WCBA courses must be completed with the grade of a “C” or higher and cannot be taken credit/no credit.

Learning Outcomes

- Identification and knowledge of leadership and management (how they are similar and different, and importance of both)
- Understand the impact of leadership styles on organizational performance
- Understand how leadership and diversity influence organizational effectiveness
- Understand and apply social influence principles

Bachelor of Science in Business Administration in Management

Management is concerned with effective and efficient utilization of resources to achieve organizational goals. If resources were unlimited, there would be no need to manage them. The BSBA in Management program explores the fundamental concepts of management drawn from behavioral sciences to help students understand the nature of the rapidly changing workplace, the underlying forces contributing to this change, and leverage such understanding to enhance organizational performance.

Students enrolled in the BSBA in Management program will take required courses in subjects such as Project and Quality Management, Managing Individuals in Organizations, and Leadership. In addition, they are also required to choose one of three tracks - Management Information Systems, Supply Chain Management, and General Management.

All business majors are strongly encouraged to complete internships. Internships are career-related work experiences that enable students to apply their knowledge and skills in an organizational setting. In the WCBA, internships that are approved for academic credit must be paid. Completing a career-related internship increases a student’s job opportunities upon graduation.

BSBA in Management students at Youngstown State University have the opportunity to build their leadership skills through various WCBA student organizations (http://www.ysu.edu/academics/williamson-college-business-administration/student-organizations-and-experiences/).

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 1550</td>
<td>Writing 1</td>
<td>3</td>
</tr>
<tr>
<td>or ENGL 1549</td>
<td>Writing 1 with Support</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 1551</td>
<td>Writing 2</td>
<td>3</td>
</tr>
<tr>
<td>CMST 1545</td>
<td>Communication Foundations</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics Requirement Met through MATH 1552 (see Business Tool Courses)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Arts &amp; Humanities (6 SH)</td>
<td>Arts &amp; Humanities required for major</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 2628</td>
<td>Business Ethics</td>
<td>3</td>
</tr>
<tr>
<td>Arts &amp; Humanities Elective</td>
<td>Met through ECON 2610 and ECON 2630 (see Business Tool courses)</td>
<td>3</td>
</tr>
<tr>
<td>Natural Science One Science Class must include a lab</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Social Sciences (6 SH)</td>
<td>Social &amp; Personal Awareness</td>
<td>6</td>
</tr>
</tbody>
</table>

BUSINESS TOOL COURSE REQUIREMENTS

- BUS 1500 Exploring Business
- BUS 2600 Business Applications of Microsoft Excel
- MATH 1552 Applied Mathematics for Management
- ECON 2610 Principles 1: Microeconomics
- ECON 2630 Principles 2: Macroeconomics
- MGT 2604 Legal Environment of Business 1
- ACCT 2602 Financial Accounting
- ACCT 2603 Managerial Accounting
- ECON 3788 Statistics for Business and Economics 1

To enroll in upper level business courses students must have a minimum 2.5 overall GPA and successful completion of all business tool courses.
All Upper Level Business Classes must be complete with the grade of a "C" or higher and cannot be taken credit/no credit

### Management Major Course Requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 3715</td>
<td>Principles of International Business</td>
<td>3</td>
</tr>
<tr>
<td>BUS 3700</td>
<td>Business Analytics</td>
<td>3</td>
</tr>
<tr>
<td>FIN 3720</td>
<td>Business Finance</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 3702</td>
<td>Business Professional</td>
<td>1</td>
</tr>
<tr>
<td>MKTG 3703</td>
<td>Marketing Concepts and Practice</td>
<td>3</td>
</tr>
<tr>
<td>MGT 3725</td>
<td>Fundamentals of Management</td>
<td>3</td>
</tr>
<tr>
<td>MGT 3761</td>
<td>Management Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>MGT 3789</td>
<td>Operations Management</td>
<td>3</td>
</tr>
<tr>
<td>MGT 4850</td>
<td>Strategic Management and Leadership</td>
<td>3</td>
</tr>
<tr>
<td>MGT 3715</td>
<td>Employee Relations and Workplace Ethics</td>
<td>3</td>
</tr>
<tr>
<td>MGT 3750</td>
<td>Managing Individuals in Organizations</td>
<td>3</td>
</tr>
<tr>
<td>MGT 3701</td>
<td>Leadership in Business and Society</td>
<td>3</td>
</tr>
<tr>
<td>MGT 4881</td>
<td>Project and Quality Management</td>
<td>3</td>
</tr>
</tbody>
</table>

### MANAGEMENT TRACKS (9 SH)

- Students will take 3 classes from one of the following tracks: Management Information Systems, Supply Chain Management or General Management.

#### Management Information Systems Track (9 SH)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGT 3771</td>
<td>Social Media and E-Commerce</td>
<td></td>
</tr>
<tr>
<td>MGT 5835</td>
<td>Systems Analysis and Design</td>
<td></td>
</tr>
<tr>
<td>MGT 5865</td>
<td>Database Management Systems</td>
<td></td>
</tr>
</tbody>
</table>

#### Supply Chain Management Track (9 SH)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGT 4820</td>
<td>Supply Chain Management</td>
<td></td>
</tr>
<tr>
<td>MGT 4822</td>
<td>Scheduling and Inventory Management</td>
<td></td>
</tr>
<tr>
<td>MGT 4882</td>
<td>Seminar in Logistics</td>
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</tr>
</tbody>
</table>

#### General Management Track (9 SH)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGT 3705</td>
<td>Fundamentals of Occupational Safety</td>
<td></td>
</tr>
<tr>
<td>MGT 3715</td>
<td>Employee Relations and Workplace Ethics</td>
<td></td>
</tr>
<tr>
<td>MGT 3755</td>
<td>Managing Workplace Diversity</td>
<td></td>
</tr>
<tr>
<td>MGT 4810</td>
<td>Compensation and Performance Appraisal</td>
<td></td>
</tr>
<tr>
<td>MGT 4819</td>
<td>Selection, Training, and Development</td>
<td></td>
</tr>
<tr>
<td>MGT 4844</td>
<td>Strategic Human Resource Management</td>
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</tr>
<tr>
<td>BUS 3720</td>
<td>Nonprofit Leadership</td>
<td></td>
</tr>
<tr>
<td>BUS 3780</td>
<td>Financial Management and Fundraising for Nonprofit Organizations</td>
<td></td>
</tr>
<tr>
<td>ENT 3700</td>
<td>Entrepreneurship New Venture Creation</td>
<td></td>
</tr>
<tr>
<td>ENT 3750</td>
<td>Entrepreneurship-Small Business Financial Management</td>
<td></td>
</tr>
<tr>
<td>ENT 4800</td>
<td>Entrepreneurship-Business Plan Development</td>
<td></td>
</tr>
</tbody>
</table>

### UPPER LEVEL BUSINESS ELECTIVE

Select four classes (12 SH) of upper level business courses (ACCT, ADV, BUS, ENT, FIN, MKTG, MGT 3000-5000 LEVEL) 12

### NON BUSINESS ELECTIVES

6

### Total Semester Hours

121-123

### Year 1

#### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>YSU 1500</td>
<td>Success Seminar or Strong Start Success Seminar</td>
<td>1-2</td>
</tr>
<tr>
<td>ENGL 1550</td>
<td>Writing 1</td>
<td>3</td>
</tr>
<tr>
<td>BUS 1500</td>
<td>Exploring Business</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1552</td>
<td>Applied Mathematics for Management</td>
<td>4</td>
</tr>
<tr>
<td>CMST 1545</td>
<td>Communication Foundations</td>
<td>3</td>
</tr>
<tr>
<td>Social &amp; Personal Awareness</td>
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</tbody>
</table>

### Semester Hours

17-18

#### Spring

<table>
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<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 1551</td>
<td>Writing 2</td>
<td>3</td>
</tr>
<tr>
<td>ECON 2610</td>
<td>Principles 1: Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 3702</td>
<td>Legal Environment of Business 1</td>
<td>3</td>
</tr>
<tr>
<td>BUS 2600</td>
<td>Business Applications of Microsoft Excel</td>
<td>3</td>
</tr>
<tr>
<td>GE: Natural Science</td>
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</table>

### Semester Hours

15

### Year 2

#### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 2630</td>
<td>Principles 2: Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 2602</td>
<td>Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 3742</td>
<td>Business Writing</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 2628</td>
<td>Business Ethics</td>
<td>3</td>
</tr>
<tr>
<td>GE: Lab Science</td>
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</table>

### Semester Hours

16

#### Spring

<table>
<thead>
<tr>
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<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 2603</td>
<td>Managerial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ECON 3788</td>
<td>Statistics for Business and Economics 1</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 3702</td>
<td>Business Professional</td>
<td>1</td>
</tr>
<tr>
<td>MGT 3725</td>
<td>Fundamentals of Management</td>
<td>3</td>
</tr>
<tr>
<td>GE: Arts &amp; Humanities</td>
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<td></td>
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### Semester Hours

13

### Year 3

#### Fall

<table>
<thead>
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<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGT 3750</td>
<td>Managing Individuals in Organizations</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 3703</td>
<td>Marketing Concepts and Practice</td>
<td>3</td>
</tr>
<tr>
<td>BUS 3700</td>
<td>Business Analytics</td>
<td>3</td>
</tr>
<tr>
<td>Upper Level Management Track Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Upper Level Business Elective</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

### Semester Hours

15

#### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGT 4801</td>
<td>Leadership in Business and Society</td>
<td>3</td>
</tr>
<tr>
<td>MGT 3761</td>
<td>Management Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>MGT 3789</td>
<td>Operations Management</td>
<td>3</td>
</tr>
<tr>
<td>Upper Level Business Elective</td>
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<td></td>
</tr>
</tbody>
</table>

### Semester Hours

15

### Year 4

#### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGT 4881</td>
<td>Project and Quality Management</td>
<td>3</td>
</tr>
<tr>
<td>MGT 3761</td>
<td>Management Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>MGT 3789</td>
<td>Operations Management</td>
<td>3</td>
</tr>
<tr>
<td>Upper Level Business Elective</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

### Semester Hours

15

#### Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGT 4850</td>
<td>Strategic Management and Leadership</td>
<td>3</td>
</tr>
<tr>
<td>Upper Level Management Track Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Upper Level Business Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GE: Social &amp; Personal Awareness</td>
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<td></td>
</tr>
<tr>
<td>Non Business Elective</td>
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<td></td>
</tr>
</tbody>
</table>

### Semester Hours

15

### Total Semester Hours

121-122
Management can be met through completion of the following requirements: directing, and controlling an organization to accomplish the goal. A minor in management includes planning, organizing, staffing, leading or motivating employees to excel in their jobs; typically, computer systems are used for managing organizations. Students interested in learning more about the field of Management Information Systems through a minor would need to complete the following requirements:

### Minor in Management Information Systems
Youngstown State University students are invited to enhance their educational experience with a minor in Management Information Systems. Management information systems (MIS) provides information that organizations require to manage themselves efficiently and effectively; typically, computer systems are used for managing organizations. Students interested in learning more about the field of Management Information Systems through a minor would need to complete the following requirements:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 1500</td>
<td>Exploring Business</td>
<td>3</td>
</tr>
<tr>
<td>MGT 3725</td>
<td>Fundamentals of Management</td>
<td>3</td>
</tr>
<tr>
<td>MGT 3761</td>
<td>Management Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>MGT 3771</td>
<td>Social Media and E-Commerce</td>
<td>3</td>
</tr>
<tr>
<td>MGT 3789</td>
<td>Operations Management</td>
<td></td>
</tr>
<tr>
<td>MGT 4820</td>
<td>Supply Chain Management</td>
<td></td>
</tr>
<tr>
<td>MGT 4821</td>
<td>Business Process Integration</td>
<td></td>
</tr>
<tr>
<td>MGT 4881</td>
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Total Semester Hours: 18

If any of the above courses are part of the student's major, an alternate course needs to be substituted. Students interested in declaring a minor in Management Information Systems need to complete an Intra University Transfer Request form with their academic advisor. Students pursuing a WCBA minor must meet all course prerequisites to enroll in WCBA courses, including a minimum overall GPA of 2.5 for all upper division business courses. WCBA minor courses must be completed with the grade “C” or higher and cannot be taken credit/no credit.

### Minor in Management
Youngstown State University students are invited to enhance their educational experience with a minor in Management. Management in businesses and organizations is the function that coordinates the efforts of people to accomplish goals and objectives by using available resources efficiently and effectively. Management includes planning, organizing, staffing, leading or directing, and controlling an organization to accomplish the goal. A minor in Management can be met through completion of the following requirements:

<table>
<thead>
<tr>
<th>COURSE</th>
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<tbody>
<tr>
<td>BUS 1500</td>
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<tr>
<td>MGT 3750</td>
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</table>

Select three of the following:

- MGT 3705 | Fundamentals of Occupational Safety | 3 |
- MGT 3715 | Employee Relations and Workplace Ethics | 3 |
- MGT 3755 | Managing Workplace Diversity | 3 |
- MGT 3771 | Social Media and E-Commerce | 3 |
- MGT 3789 | Operations Management | 3 |
- MGT 4801 | Leadership in Business and Society | 3 |
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### Marketing
Bruce Keillor, Chair
(330) 941-3080

Marketing deals with processes that provide products and services to buyers with the goal of satisfying their needs and wants and developing ways to meet them. Marketing is the fundamental role of business—both for-profit and not-for-profit. Indeed, it was recently stated in the Harvard Business Review that, within the context of business, “marketing is everything.” The success of an organization’s marketing determines the success of the organization. It is no wonder then that marketing is the central activity of business organizations in market economies.

Marketing addresses a number of business issues, including deciding what products to offer, to whom, at what price, and at what location. Marketing majors in the Williamson College of Business Administration (WCBA) enroll in a wide variety of courses that examine these areas in great detail to provide them with the tools and knowledge to succeed in the world of business. For those not majoring in marketing, the course offerings provide a knowledge of how businesses function and how other business operations, such as finance and management, provide the inputs necessary for successful decision making and strategy implementation.

Students interested in declaring a minor in Marketing need to complete the following requirements:

- Recognize, analyze, and solve marketing and marketing-related problems.
- Apply appropriate technologies to solve marketing and marketing-related problems.
- Demonstrate effective oral and written communication skills.
- Identify and assess ethical and social responsibility issues.
- Demonstrate professional behavior in marketing and marketing-related situations.

### Learning Outcomes

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ADV 3710  Basic Public Relations  3 s.h.
Study of the management function which investigates and evaluates public attitudes, policies, means, and techniques used in the field to earn public understanding and acceptance.
Prereq.: ENGL 1551 and GPA of 2.5.

ADV 3711  Marketing Communications  3 s.h.
Examines the integration of promotional activities within a marketing context. Presents the marketing communication role of the four elements in the promotional mix then takes a holistic perspective that focuses on the interrelationships among advertising, public relations, sales promotion, and personal selling.
Prereq.: sophomore standing; 2.5 GPA.

ADV 3712  Creative Strategies in IMC  3 s.h.
The creative process is related to the different message and graphic needs required in advertising, public relations, and sales promotion. Examines the synergistic possibilities of the separate efforts focused on the same creative strategy within an integrated marketing communications (IMC) campaign.
Prereq.: ADV 3711 and GPA of 2.5.

ADV 3717  Media Planning and Buying  3 s.h.
Planning, executing, and controlling of media buys. Techniques of allocation of budget among print and electronic media explored on national, regional, and local levels familiarizing the student with syndicated media resources.
Prereq.: ADV 3711 and GPA of 2.5.

ADV 3720  Introduction to Adobe Creative Cloud  3 s.h.
The Adobe Creative Cloud is a suite of programs to aid in the development and execution of graphical assets used for marketing, advertising, and branding. This course will introduce the student to the inner working of Adobe Creative Cloud programs and how they relate to one another as well as the proper usage of the programs. Through practical exercises, students will become fluent in industry standard software for line art, logos, vector graphics, and page layout for both print and web as well as tricks and time efficient techniques to keep work clean and professional.
Prereq.: Sophomore standing; 2.5 GPA.

ADV 4850  Advertising Internship  3 s.h.
Through employment with participating business organizations the student will receive professional advertising experience. Required paper on the relationship between advertising theory and practice.
Prereq.: MKTG 3703, 2.5 GPA.

ADV 4855  IMC Campaigns  3 s.h.
Capstone course in the integrated marketing communications curriculum. By employing the fundamental theories and practices garnered from previous integrated marketing communications courses for a specific IMC problem, the focus is the development of an integrated marketing communications campaign.
Prereq.: ADV 3711, ADV 3712, ADV 3717 and GPA of 2.5.

ADV 4899  Independent Study  3 s.h.
This course will allow students to develop a special topic of interest under the direct supervision of a marketing faculty member. The objective of this course is to provide the student with a strong understanding of a specific area of advertising.
Prereq.: ADV 3711; 2.5 GPA.

Entrepreneurship

ENT 3700  Entrepreneurship New Venture Creation  3 s.h.
An examination of the entrepreneurial process from opportunity recognition and assessment through the launch of the new firm. Emphasis placed on exploring creativity and innovation. Students will develop a feasible business idea, present the idea as an elevator pitch, and write a business proposal.
Prereq.: BUS 1500; sophomore standing; GPA 2.5.

ENT 3750  Entrepreneurship-Small Business Financial Management  3 s.h.
Practical application of accounting and finance concepts in small/new businesses. Emphasis on raising capital, understanding financial statements, implementing small business accounting software, and forecasting revenue, expenses, and cash flow.
Prereq.: ENT 3700 or FIN 3720; GPA 2.5.

ENT 4800  Entrepreneurship-Business Plan Development  3 s.h.
An in-depth study of the aspects of a successful business plan. An individual business plan will be developed by students based on the analysis of a viable business concept.
Prereq.: ENT 3700 and ENT 3750 or MGT 3725 and MKTG 3703 and FIN 3720; GPA 2.5.

ENT 4850  Entrepreneurship Internship  3 s.h.
The student is given the opportunity to relate theory to practice in an on-site field experience in a new venture or local small business. Student works 12-15 hours per week under direct supervision of company management and direct guidance of faculty advisor. A weekly journal and final report are required.
Prereq.: ENT 3700; ENT 3750; ENT 4800; GPA 2.5; Approval of Director.
ENT 4851  Field Studies in Entrepreneurship  3 s.h.
Students work with actual problems and opportunities faced by small businesses under faculty supervision. Problems/opportunities are defined, analyzed and researched. Recommendations are developed and presented to business owners for evaluation.
Prereq.: ENT 3700; ENT 3750; ENT 4800 or MGT 3725; MKTG 3703; FIN 3720; GPA 2.5.

Marketing

MKTG 1520  Selected Marketing Topics  1-3 s.h.
Topics vary each semester. Subject matter and number of credit hours announced in advance of each offering. May be taken twice with change of topic.
Prereq.: permission of instructor.

MKTG 3702  Business Professionalism  1 s.h.
This course is intended to help students prepare for and accomplish a successful transition from college to a professional career. Students will be challenged to understand the various elements of business professionalism including etiquette, communications, image, conflict resolution, career exploration and job search.
Prereq.: BUS 1500 or 1500H (grade of “C” or better); Sophomore standing; GPA of 2.5.

MKTG 3703  Marketing Concepts and Practice  3 s.h.
The activities involved in marketing products, services, and ideas examined within a framework of customer management. Topics include global marketing environment, market analysis and segmentation, consumer behavior, product development and management, pricing, promotion, and distribution. Marketing is examined from its role as a central function of business and non-profit organizations, and from its dominant role in a market economy.
Prereq.: “C” or better in BUS 1500 and 2.5 GPA and junior standing.

MKTG 3709  Retail Marketing  3 s.h.
Retailing is the largest industry and the dominant employer in the U.S. economy. The industry is explored, with particular emphasis on understanding the activities of retailers, both large and small. Topics include shopper behavior, store location, store layout, product presentation, and customer service. The criteria for success in retailing, the impact of technology on retailing, and the retail process examined within the larger domain of marketing. Beneficial to all marketing and business majors, as well as others engaged in shopping activities.
Prereq.: MKTG 3703 and GPA of 2.5.

MKTG 3720  Business to Business Marketing  3 s.h.
Characteristics of Manufacturers’ goods, channels of distribution, functions of intermediates, distribution costs, marketing research, government control, and legal limitations. Product policies, service policies, packaging policies, price policies. Industrial advertising organization, planning and budgeting, uses of advertising agencies and national advertising media, sales manuals, dealer helps.
Prereq.: MKTG 3703 and GPA of 2.5.

MKTG 3726  Consumer Behavior  3 s.h.
Individual and group behavior as related to marketing consumer behavior; considered from both the standpoint of the marketing manager and from that of the individual as a consumer. The behavioral sciences serve as a background to provide standards for the social and human evaluation of current marketing activities. Topics include the buyer as problem solver, buying decision processes and models, measurement of promotional effectiveness, and life style analysis. May be taken concurrently with MKTG 3703.
Prereq.: GPA of 2.5.

MKTG 3740  Professional Selling  3 s.h.
Personal selling and sales management examined within the marketing environment. Emphasis on marketing relationships, buyer motivation and behavior, selling strategy and sales management techniques, 2.5 GPA.
Prereq.: BUS 1500 and sophomore standing.

MKTG 3742  Organizational Purchasing  3 s.h.
Examination of procurement and purchasing activities within the organization with a concentration on the multiple levels of supplier and customer relationships. Topics include current trends in procurement and sourcing, purchasing policy and procedures, supplier evaluation and selection, sourcing processes, and contract management.
Prereq.: MKTG 3703; 2.5 GPA.

MKTG 3745  Sales and Account Management  3 s.h.
The course provides an overview of sales and account management. Concepts covered include strategic planning, sales leadership, analyzing customer-client-buyer markets, and designing and developing a sales force.
Prereq.: MKTG 3703; MKTG 3740 (may be taken concurrently) and overall GPA of 2.5.

MKTG 3747  Negotiations Concepts and Strategies  3 s.h.
The purpose of this course is to understand the theory and processes of negotiation so that the student can successfully negotiate in a variety of professional settings.
Prereq.: MKTG 3703 and overall GPA 2.5.

MKTG 3749  Introduction to Sports Marketing  3 s.h.
The field of Sports Marketing has emerged as a notable sector in commerce over the past three decades. This course will explore strategies of marketing through sports which include conventional marketing approaches as well as innovative sponsorship strategies. The course will also examine the more specialized aspects of sports marketing which involve active measures that are designed to influence consumer preferences for a variety of sports products and service - the marketing of sports.
Prereq.: MKTG 3703.

MKTG 3750  Product and Brand Management  3 s.h.
New product development and brand creation process from idea generation to launch; diffusion of innovation and sales forecast of new product, market entry strategy, branding of new product, business plan for new product.
Prereq.: MKTG 3703 and 2.5 GPA.

MKTG 4811  Interactive Marketing  3 s.h.
In-depth investigation of interactive marketing including direct response marketing and other technology-based forms of business-customer interaction including measuring the effectiveness and the integration of interactive marketing activities into the overall marketing strategy.
Prereq.: MKTG 3703; GPA of 2.5.

MKTG 4815  Marketing Research and Analytics  3 s.h.
Introduction to the major areas of marketing research. Problem definition, research design, gathering information and analysis to assist marketing management with the decision making process. Emphasis will be placed on using data and information in an applied context.
Prereq.: MKTG 3703 and GPA of 2.5.

MKTG 4825  Marketing Management  3 s.h.
Comprehensive study of the management functions in marketing including organization, planning, research, merchandising, sales, advertising and promotion, marketing channels, and control related to corporate policies and objectives. Management practices covering recruiting, selection, training, equipping, compensating, and supervising.
Prereq.: MKTG 3703, MKTG 3726 and GPA of 2.5; May be taken concurrently with MKTG 4815.

MKTG 4842  Special Topics in Marketing  1-3 s.h.
Topics vary each semester. Subject matter, number of credits, and prerequisites announced in advance of each topic. No more than one Special Topic per semester is permitted. May be taken twice with change of topic.
Prereq.: Permission of Chairperson; 2.5 GPA; junior standing.

MKTG 4842Q  Special Topics in Marketing Global Entrepreneurship  1-3 s.h.
Topics vary each semester. Subject matter, number of credits, and prerequisites announced in advance of each topic. No more than one Special Topic per semester is permitted. May be taken twice with change of topic.
Prereq.: Permission of Chairperson; 2.5 GPA; junior standing.
MKTG 4845 International Marketing 3 s.h.
Development of United States trade, foreign trade promotion, organization, export and import procedures and practices. Presented from the viewpoint of the international marketing manager who must recognize differences between markets in various countries as influenced by their particular cultural and economic environments.
Prereq.: MKTG 3703 and GPA of 2.5.

MKTG 4846 Marketing Channels and Logistics 3 s.h.
Consideration of the problems likely to arise in the planning for and movement of goods through channels of distribution from producer to end-user. Elements of the logistical system, including transportation modes, plant and warehouse location, and inventory size determinations. Behavioral and functional relationships with and between channel members in a supply chain.
Prereq.: MKTG 3703 and GPA of 2.5.

MKTG 4849 Export Strategy 3 s.h.
The student will learn how to manage and operate export-based business. The focus will be on identifying local products, local companies, and an international opportunity to export by researching a specific market and working directly with a local firm.
Prereq.: MKTG 3703, GPA 2.5.

MKTG 4850 Marketing Internship 3 s.h.
Through employment with participating business organizations the student receives professional marketing experience. Candidates work for the entire semester at a local business organization under the direct guidance of a faculty advisor. Required paper at the end of the course on the relationship of marketing theory and practice.
Prereq.: MKTG 3703 and GPA of 2.5.

MKTG 4851 Services Marketing 3 s.h.
Cross-functional approach to the marketing of customer services in profit and non-profit organizations, including domestic and international opportunity analysis, customer analysis, financial analysis, strategy formulation, process and systems management, and quality improvement.
Prereq.: MKTG 3703 and GPA of 2.5.

MKTG 4852 Advanced Marketing Internship 3 s.h.
This course is an extension of MKTG 4850 Marketing Internship. It is designed to allow students to continue a current internship at a more advanced level or to engage in additional internship experience.
Prereq.: MKTG 4850; 2.50 GPA.

MKTG 4853 Sales Internship 3 s.h.
Through employment with a participating business organization the student receives professional sales experience. Candidates work for the entire semester at an approved business organization.
Prereq.: MKTG 3703 and GPA of 2.5.

MKTG 4870 Small Business/Entrepreneurship 3 s.h.
Study of the small business environment and the problems in starting a business. How small businesses apply the managerial functions in using their resources.
Prereq.: MKTG 3703.
Cross-listed: MGT 4870.

MKTG 4871 Small Business Enterprise 3 s.h.
Students work with actual problems faced by small businesses under faculty supervision. Problems are defined, analyzed, researched. Recommendations are developed and presented to clients for evaluation.
Prereq.: MKTG 3703.
Cross-listed: MGT 4871.

MKTG 4899 Marketing Independent Study 1-3 s.h.
This course will allow students to develop a topic of interest under the direct supervision of a marketing faculty member.
Prereq.: MKTG 3703 and 2.5 overall GPA.

Bachelor of Science in Business Administration in Advertising and Public Relations

Advertising is the practice of producing information to promote the sale of products or services. Professionals in advertising create and communicate advertising strategies, develop advertising campaigns, and promote and sell products, services and brands.

Advertising majors at Youngstown State University take courses in marketing communication, integrated marketing campaigns, media planning and buying, consumer behavior, and marketing research.

career opportunities

Advertising professionals are involved in creating campaigns to convince consumers to purchase or use certain products. Campaigns are launched through a variety of menus including television, billboards, and social media. The advertisements are created to enhance the public’s perception and to get people excited about a product.

All business majors are strongly encouraged to complete internships. Internships are career-related work experiences that enable students to apply their knowledge and skills in an organizational setting. In the WCBA, internships that are approved for academic credit must be paid. Completing a career-related internship increases a student’s job opportunities upon graduation.

student experiences

Advertising majors at Youngstown State University have the opportunity to build their leadership skills through various student organizations at YSU.

advertisement.jpg

ECON 2610
ECON 2630
BUS 2600
MATH 1552
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<td>ACCT 2602</td>
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<td>Managerial Accounting</td>
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<td>ENGL 3742</td>
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<td>ECON 3788</td>
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**BUSINESS CORE REQUIRED COURSES**

To enroll in upper level business courses student must have successfully completed ENGL 1549 or 1550, ENGL 1551, PHIL 2628, CMST 1545, all business tool courses and have a minimum 2.5 overall GPA.

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</table>

**ADVERTISING/PUBLIC RELATIONS COURSES**

Select 6 SH of upper level MKTG or ADV courses.

**UPPER LEVEL BUSINESS COURSES**

Select 3 SH of upper level business courses (ACCT, ADV, BUS, ENT, FIN, MKTG).

**NON-BUSINESS ELECTIVE**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Semester Hours</th>
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<tbody>
<tr>
<td>ECON 3788</td>
<td>Statistics for Business and Economics 1</td>
<td>3</td>
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<tr>
<td>ADV 3710</td>
<td>Basic Public Relations</td>
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<tr>
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**Semester Hours**

**Fall**

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>ACCT 2602</td>
<td>Financial Accounting</td>
<td>3</td>
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<tr>
<td>ECON 3630</td>
<td>Principles 2: Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 3742</td>
<td>Business Writing</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 2628</td>
<td>Business Ethics</td>
<td>3</td>
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**Year 3**

<table>
<thead>
<tr>
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<tr>
<td>MKTG 3726</td>
<td>Consumer Behavior</td>
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<tr>
<td>MGT 3761</td>
<td>Management Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>FIN 3720</td>
<td>Business Finance</td>
<td>3</td>
</tr>
<tr>
<td>BUS 3715</td>
<td>Principles of International Business</td>
<td>3</td>
</tr>
<tr>
<td>ADV 3711</td>
<td>Marketing Communications</td>
<td>3</td>
</tr>
<tr>
<td>BUS 3700</td>
<td>Business Analytics</td>
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<tr>
<td>GE: Social and Personal Awareness</td>
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**Semester Hours**

**Fall**

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<thead>
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<tr>
<td>MKTG 3726</td>
<td>Consumer Behavior</td>
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<tr>
<td>MGT 3761</td>
<td>Management Information Systems</td>
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<tr>
<td>FIN 3720</td>
<td>Business Finance</td>
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</tr>
<tr>
<td>BUS 3715</td>
<td>Principles of International Business</td>
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</tr>
<tr>
<td>ADV 3711</td>
<td>Marketing Communications</td>
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<tr>
<td>BUS 3700</td>
<td>Business Analytics</td>
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**Year 4**

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<tbody>
<tr>
<td>Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ADV 4855</td>
<td>IMC Campaigns (spring term only)</td>
<td>3</td>
</tr>
<tr>
<td>MGT 4850</td>
<td>Strategic Management and Leadership</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 4815</td>
<td>Marketing Research and Analytics</td>
<td>3</td>
</tr>
<tr>
<td>Upper Level Advertising/Marketing Course</td>
<td>Internship Recommended</td>
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<tr>
<td>Non-Business Courses</td>
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**Semester Hours**

**Fall**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADV 3712</td>
<td>Creative Strategies in IMC (fall term only)</td>
<td>3</td>
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<tr>
<td>ADV 3717</td>
<td>Media Planning and Buying (fall term only)</td>
<td>3</td>
</tr>
<tr>
<td>MGT 3789</td>
<td>Operations Management</td>
<td>3</td>
</tr>
<tr>
<td>Upper Level Business Course</td>
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<td>3</td>
</tr>
<tr>
<td>Non Business Elective</td>
<td></td>
<td>2</td>
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</tbody>
</table>

**Semester Hours**

**Total Semester Hours**

120-122

**Learning Outcomes**

- Students will demonstrate knowledge and understanding of marketing communication theories and concepts.
- Students will demonstrate effective marketing communication skills.
- Students will develop skills to recognize, analyze and solve marketing communication problems through critical thinking.
Students will be able to apply learned knowledge and skills to develop a comprehensive integrated marketing communication campaign.

**Minor in Advertising and Public Relations**

Youngstown State University students are invited to enhance their educational experience with a minor in Advertising/Public Relations. Advertising and public relations is the study of communications by organizations to their various audiences, public image and to a large extent sales. The minor in Advertising/Public Relations can be met by completing the following requirements:

**Course Title**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Required Courses</strong></td>
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</tr>
<tr>
<td>ADV 3710</td>
<td>Basic Public Relations</td>
<td>3</td>
</tr>
<tr>
<td>ADV 3711</td>
<td>Marketing Communications</td>
<td>3</td>
</tr>
<tr>
<td>ADV 3712</td>
<td>Creative Strategies in IMC</td>
<td>3</td>
</tr>
<tr>
<td>ADV 4855</td>
<td>IMC Campaigns</td>
<td>3</td>
</tr>
<tr>
<td><strong>Advertising/Marketing Courses (6 SH)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ADV 3717</td>
<td>Media Planning and Buying</td>
<td>6</td>
</tr>
<tr>
<td>MKTG 3740</td>
<td>Professional Selling</td>
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</tr>
<tr>
<td>MKTG 4811</td>
<td>Interactive Marketing</td>
<td></td>
</tr>
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</table>

**Total Semester Hours** 18

Students interested in declaring a minor in Advertising/Public Relations need to complete an *Intra University Transfer Request form* with their academic advisor. Students pursuing a WCBA minor must meet all course prerequisites to be eligible to register for a WCBA course, including a minimum overall GPA of 2.5 for all upper division business courses. WCBA minor courses must be completed with the grade of a "C" or higher and cannot be taken credit/no credit.

**Minor in Marketing**

Youngstown State University students are invited to enhance their educational experience with a minor in Marketing. Marketing deals with processes that provide products and services to buyers with the goal of satisfying their needs and wants. Students interested in learning more about the field of marketing through a minor would need to complete the following requirements:

**Course Title**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Required Courses</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BUS 1500</td>
<td>Exploring Business</td>
<td>3</td>
</tr>
<tr>
<td>MGT 2604</td>
<td>Legal Environment of Business</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 3702</td>
<td>Business Professionalism</td>
<td>1</td>
</tr>
<tr>
<td>MKTG 3703</td>
<td>Marketing Concepts and Practice</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 3740</td>
<td>Professional Selling</td>
<td>3</td>
</tr>
<tr>
<td><strong>MARKETING COURSES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Select 6 SH of upper level MKTG and/or ADV courses</td>
<td>6</td>
<td></td>
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</table>

**Total Semester Hours** 19

Students interested in declaring a minor in Marketing need to complete an *Intra University Transfer Request form* with their academic advisor. Students must meet course prerequisites to enroll in WCBA courses, including a minimum 2.5 overall GPA for upper level business courses. WCBA courses must be completed with the grade of a "C" or higher and cannot be taken credit/no credit.

**Bachelor of Science in Business Administration in Marketing: Management Track**

The Marketing Management track of the Marketing major focuses on the strategic planning and assessment of marketing as well as management of marketing, sales, advertising, and public relations personnel in a business or other organization.

Marketing revolves around the product or service of the business, promotion of the product, price at which it is sold, and how it is distributed to the customer. Professionals in marketing create and communicate marketing strategies, develop marketing campaigns, and work with sales teams to sell products. The Marketing major offers two tracks for students to specialize in based upon their career goals.

**Career Opportunities**

Marketing can be defined as being the intermediary function between product development and sales. There are many avenues in the field of marketing including advertising, public relations, media planning, sales strategy and more. Marketing professionals create, manage and enhance good, services and brands. The Marketing Management major at YSU prepares students for leadership positions in the field.

All business majors are strongly encouraged to complete internships. Internships are career-related work experiences that enable students to apply their knowledge and skills in an organizational setting. In the WCBA, internships that are approved for academic credit must be paid. Completing a career-related internship increases a student’s job opportunities upon graduation.

**Student Experiences**

Marketing majors at Youngstown State University have the opportunity to build their leadership skills through various student organizations (http://www.ysu.edu/academics/williamson-college-business-administration/student-organizations-and-experiences/).

**Course Title**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FIRST YEAR REQUIREMENT - STUDENT SUCCESS SEMINAR</strong></td>
<td></td>
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</tr>
<tr>
<td>YSU 1500</td>
<td>Success Seminar</td>
<td>1-2</td>
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<tr>
<td>or SS 1500</td>
<td>Strong Start Success Seminar</td>
<td></td>
</tr>
<tr>
<td>or HONR 1500</td>
<td>Intro to Honors</td>
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<tr>
<td><strong>GENERAL EDUCATION</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 1550</td>
<td>Writing 1</td>
<td>3-4</td>
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<tr>
<td>or ENGL 1549</td>
<td>Writing 1 with Support</td>
<td></td>
</tr>
<tr>
<td>ENGL 1551</td>
<td>Writing 2</td>
<td>3</td>
</tr>
<tr>
<td>CMST 1545</td>
<td>Communication Foundations</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics requirement</td>
<td>Met through MATH 1502 (see Business Tool)</td>
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</tr>
<tr>
<td>Arts &amp; Humanities (6 SH)</td>
<td>Met through PHIL 2628 required course</td>
<td></td>
</tr>
<tr>
<td>PHIL 2628</td>
<td>Business Ethics</td>
<td>3</td>
</tr>
<tr>
<td>Arts &amp; Humanities Elective</td>
<td>Met through ECON 2610 and ECON 2630 (see Business Tool)</td>
<td></td>
</tr>
<tr>
<td>Social Science (6 SH)</td>
<td>One science course must include a lab</td>
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<tr>
<td>GE: Natural Science</td>
<td>Met through ECON 2610 and ECON 2630 (see Business Tool)</td>
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</tr>
<tr>
<td>GE: Social and Personal Awareness</td>
<td>Met through ECON 2610 and ECON 2630 (see Business Tool)</td>
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</tr>
<tr>
<td><strong>BUSINESS TOOL COURSES</strong></td>
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</tr>
<tr>
<td>Business Tool courses MUST be completed with a grade of a &quot;C&quot; or higher and CANNOT be taken Credit/No Credit.</td>
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<td></td>
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<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Semester Hours</td>
</tr>
<tr>
<td>-------------</td>
<td>-----------------------------------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>ECON 2630</td>
<td>Principles 2: Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>MGT 2604</td>
<td>Legal Environment of Business 1</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 2602</td>
<td>Financial Accounting</td>
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<tr>
<td>ACCT 2603</td>
<td>Managerial Accounting</td>
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<tr>
<td>ECON 3788</td>
<td>Statistics for Business and Economics 1</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 3742</td>
<td>Business Writing</td>
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</table>

**BUSINESS CORE COURSES**

To enroll in upper level business courses students must have successfully completed ENGL 1549 or 1550, ENGL 1551, PHIL 2628, CMST 1545, all Business Tool course AND have a minimum 2.5 overall GPA.

Upper level business courses must be completed with the grade of a "C" or higher and cannot be taken credit/no credit.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Semester Hours</th>
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<tbody>
<tr>
<td>BUS 3715</td>
<td>Principles of International Business</td>
<td>3</td>
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<td>BUS 3700</td>
<td>Business Analytics</td>
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<td>FIN 3720</td>
<td>Business Finance</td>
<td>3</td>
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<tr>
<td>MKTG 3702</td>
<td>Business Professionalism</td>
<td>3</td>
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<tr>
<td>MKTG 3703</td>
<td>Marketing Concepts and Practice</td>
<td>3</td>
</tr>
<tr>
<td>MGT 3725</td>
<td>Fundamentals of Management</td>
<td>3</td>
</tr>
<tr>
<td>MGT 3761</td>
<td>Management Information Systems</td>
<td>3</td>
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<td>MGT 3789</td>
<td>Operations Management</td>
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<tr>
<td>MGT 4850</td>
<td>Strategic Management and Leadership</td>
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**MARKETING MAJOR REQUIREMENTS**

<table>
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<tr>
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<th>Course Title</th>
<th>Semester Hours</th>
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<tr>
<td>MKTG 3720</td>
<td>Industrial Marketing</td>
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<td>MKTG 3726</td>
<td>Consumer Behavior</td>
<td>3</td>
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<tr>
<td>MKTG 3750</td>
<td>Product and Brand Management Spring term only</td>
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<td>MKTG 4815</td>
<td>Marketing Research and Analytics</td>
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</tr>
<tr>
<td>MKTG 4825</td>
<td>Marketing Management</td>
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</table>

**MARKETING UPPER LEVEL COURSES**

Select 6 SH of upper level MKTG or ADV courses

**BUSINESS UPPER LEVEL COURSES**

Select 9 SH of upper level business courses (ADV, ACCT, ADV, BUS, ENT, MGT, MKTG)

**NON-BUSINESS ELECTIVES**

Total Semester Hours: 120-122

120 Hours for Degree

**Year 1**

**Fall**

<table>
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<tr>
<td>ENGL 1550</td>
<td>Writing 1 or Writing 1 with Support</td>
<td>3-4</td>
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<tr>
<td>BUS 1500</td>
<td>Exploring Business</td>
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<td>MATH 1552</td>
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<td>CMST 1545</td>
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Total Semester Hours: 17-19

**Spring**

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<td>MGT 2604</td>
<td>Legal Environment of Business 1</td>
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<td>ECON 2610</td>
<td>Principles 1: Microeconomics</td>
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<td>BUS 2600</td>
<td>Business Applications of Microsoft Excel</td>
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<td>GE: Arts &amp; Humanities</td>
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Total Semester Hours: 15

**Year 2**

**Fall**

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<tbody>
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<td>Financial Accounting</td>
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**Year 3**

**Fall**

<table>
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<th>Course Title</th>
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<tbody>
<tr>
<td>ACCT 2602</td>
<td>Financial Accounting</td>
<td>3</td>
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<td>PHIL 2628</td>
<td>Business Ethics</td>
<td>3</td>
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<tr>
<td>ENGL 3742</td>
<td>Business Writing</td>
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<tr>
<td>ECON 2630</td>
<td>Principles 2: Macroeconomics</td>
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**Semester Hours**: 15

**Spring**

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<th>Semester Hours</th>
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</thead>
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<tr>
<td>MKTG 3702</td>
<td>Business Professionalism</td>
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</tr>
<tr>
<td>ECON 3788</td>
<td>Statistics for Business and Economics 1</td>
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</tr>
<tr>
<td>MKTG 3703</td>
<td>Marketing Concepts and Practice</td>
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**Semester Hours**: 14

**Year 4**

**Fall**

<table>
<thead>
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<th>Course Title</th>
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</tr>
</thead>
<tbody>
<tr>
<td>MKTG 3789</td>
<td>Operations Management</td>
<td>3</td>
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<tr>
<td>MGT 4850</td>
<td>Strategic Management and Leadership</td>
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</tr>
<tr>
<td>MKTG 4825</td>
<td>Marketing Management</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 3720</td>
<td>Industrial Marketing</td>
<td>3</td>
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<tr>
<td>Upper Level Business Course</td>
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<tr>
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**Semester Hours**: 15

**Spring**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGT 4850</td>
<td>Strategic Management and Leadership</td>
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<tr>
<td>MKTG 4825</td>
<td>Marketing Management</td>
<td>3</td>
</tr>
<tr>
<td>Upper Level Marketing/Advertising Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Upper Level Business Course</td>
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<tr>
<td>Non-Business Elective</td>
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</table>

**Semester Hours**: 15

**Total Semester Hours**: 120-122

ENGL 1550, ENGL 1551, Business Tool and upper level business courses must be completed with the grade of a "C" or higher and cannot be taken credit/no credit.

To enroll in upper level business courses students must have successfully completed ENGL 1550, ENGL 1551, PHIL 2628, CMST 1545, all Business Tool courses AND have a minimum 2.5 overall GPA.

**Learning Outcomes**

1. Students will demonstrate knowledge and understanding of the marketing mix.
2. Students will demonstrate effective business communication skills.
3. Students will be able to recognize, analyze, and solve marketing problems.
Bachelor of Science in Business Administration in Marketing: Sales Track

Marketing revolves around the product or service of the business, promotion of the product, price at which it is sold, and how it is distributed to the customer. Professionals in marketing create and communicate marketing strategies, develop marketing campaigns, and work with sales teams to sell products. The Marketing major offers two tracks for students to specialize in based upon their career goals.

The sales track in Marketing prepares students for a career in professional, business-to-business selling. Careers in sales are some of the highest paid and most rewarding for new business graduates.

**Career Opportunities**

Marketing Sales managers direct an organizations’ sales of goods, products, and/or services. Sales jobs can be found in virtually every industry including wholesale and retail trade, manufacturing, and services industries. Employment of Sales Managers is expected to grow significantly within the next 10 years as new organizations develop and existing organizations expand.

All business majors are strongly encouraged to complete internships. Internships are career-related work experiences that enable students to apply their knowledge and skills in an organizational setting. In the WCBA, internships that are approved for academic credit must be paid. Completing a career-related internship increases a student’s job opportunities upon graduation.

**Student Experiences**

Marketing majors at Youngstown State University have the opportunity to apply their knowledge and skills in an organizational setting. In the WCBA, students should consider at least one internship. Select 9 SH of upper level business courses (ACCT, ADV, BUS, ENT, FIN, MKTG, MGT). Students should consider at least one internship.

**COURSE REQUIREMENTS**

**First Year Requirement - Student Success Seminar**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>YSU 1500</td>
<td>Success Seminar</td>
<td>1-2</td>
</tr>
<tr>
<td>or SS 1500</td>
<td>Strong Start Success Seminar</td>
<td></td>
</tr>
<tr>
<td>or HONR 1500</td>
<td>Intro to Honors</td>
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</tr>
</tbody>
</table>

**General Education**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 1550</td>
<td>Writing 1</td>
<td>3-4</td>
</tr>
<tr>
<td>or ENGL 1549</td>
<td>Writing 1 with Support</td>
<td></td>
</tr>
<tr>
<td>ENGL 1551</td>
<td>Writing 2</td>
<td>3</td>
</tr>
<tr>
<td>CMST 1545</td>
<td>Communication Foundations</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics requirement</td>
<td>Met through MATH 1552 (see Business Tool)</td>
<td></td>
</tr>
<tr>
<td>Arts and Humanities (6 s.h.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHIL 2628</td>
<td>Business Ethics (required for major)</td>
<td>3</td>
</tr>
<tr>
<td>Arts and Humanities elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Natural Sciences (2 courses, 1 with lab) (7 s.h.)</td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>Social Science (6 s.h.)</td>
<td>Met through ECON 2610 and ECON 2630 (see Business Tool)</td>
<td></td>
</tr>
<tr>
<td>Social and Personal Awareness (6 s.h.)</td>
<td></td>
<td>6</td>
</tr>
</tbody>
</table>

**Business Tool Courses**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 1500</td>
<td>Exploring Business</td>
<td>3</td>
</tr>
<tr>
<td>BUS 2600</td>
<td>Business Applications of Microsoft Excel</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1552</td>
<td>Applied Mathematics for Management</td>
<td>4</td>
</tr>
<tr>
<td>ECON 2610</td>
<td>Principles 1: Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 2630</td>
<td>Principles 2: Macroeconomics</td>
<td>3</td>
</tr>
</tbody>
</table>

**Business Core Courses**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>MKTG 2604</td>
<td>Legal Environment of Business</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 2602</td>
<td>Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 2603</td>
<td>Managerial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 3742</td>
<td>Business Writing</td>
<td>3</td>
</tr>
<tr>
<td>ECON 3788</td>
<td>Statistics for Business and Economics</td>
<td>3</td>
</tr>
</tbody>
</table>

**Marketing Sales Major Courses**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>MKTG 3726</td>
<td>Consumer Behavior</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 3740</td>
<td>Professional Selling</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 3742</td>
<td>Organizational Purchasing</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 3745</td>
<td>Sales and Account Management</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 3747</td>
<td>Negotiations Concepts and Strategies</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 4815</td>
<td>Marketing Research and Analytics</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 4825</td>
<td>Marketing Management</td>
<td>3</td>
</tr>
</tbody>
</table>

**Business Upper Level Courses**

Select 9 SH of upper level business courses (ACCT, ADV, BUS, ENT, FIN, MKTG, MGT). Students should consider at least one internship.

**Non-Business Courses**

5

**Total Semester Hours**

120-122
to clients. In many organizations the performance of the sales force is often the most critical to the overall success of the firm. The Sales Minor within the Department of Marketing in the Williamson College of Business Administration enables students to develop knowledge and skills in sales and sales management that will be useful and complement their major. The Sales minor can be met through successful completion of the following requirements:

**COURSE** | **TITLE** | **S.H.**
--- | --- | ---
BUS 1500 | Exploring Business | 3
MKTG 3703 | Marketing Concepts and Practice | 3
MKTG 3740 | Professional Selling | 3
MKTG 3745 | Sales and Account Management | 3
MKTG 3747 | Negotiations Concepts and Strategies | 3
MKTG 3742 | Organizational Purchasing | 3

Total Semester Hours: 18

Students interested in declaring a minor in Sales need to complete an Intra University Transfer Request form with their academic advisor. Students must meet course prerequisites, including a minimum 2.5 overall GPA to enroll in upper level business courses. WCBA courses must be completed with the grade of a “C” or higher and cannot be taken Credit/No Credit.

### Department of Communication

(330) 941-3631
Twitter - YSU Communication (https://twitter.com/ysucomm/)
Facebook - Youngstown State University Department of Communication (https://www.facebook.com/commysu/)
Web - Department of Communication (http://cms.ysu.edu/college-creative-arts-and-communication/communication/department-communication/)

#### Mission Statement
Department of Communication faculty maintain high standards in teaching, research, and service. Department of Communication faculty members are productive scholars in the discipline, staying abreast of technological and theoretical developments. These advancements are brought into the classroom to foster students’ ability to communicate competently using traditional and mediated channels. Students are introduced to the most recent and relevant communication theory, research, and technological skills through practical activities in mediated, interpersonal, public, and professional contexts that serve students’ long-term goals, promote the university, and serve the larger Youngstown community.

#### Department Overview
The Department of Communication houses three Bachelor of Arts (B.A.) degree programs and one Master of Arts (M.A.) degree program:

- Communication Studies, B.A. (p. 582)
- Journalism, B.A. (p. 582)
- Telecommunication Studies, B.A. (p. 583)
- Professional Communication, M.A. (https://catalog.ysu.edu/graduate/graduate-programs/ma-interdisciplinary-communication/) (the graduate program is a multidisciplinary graduate program with courses in communication, marketing, and professional and technical writing; the M.A. degree requires 32 hours and may be completed in 18 months)

In addition to completing general education and major courses within specific programs, students are required to complete a minor. B.A. degrees may be earned in four years (eight semesters) if a student averages 15 to 16 hours per semester, and in three years (six semesters) if a student averages 18 to 21 hours per semester or summer.

Department of Communication students find many outlets to build on the skills they learn in and out of the classroom. For example, Lambda
Pi Eta, a communication honorary society, recognizes our outstanding students and provides opportunities for greater involvement and leadership within the field of communication. Opportunities for active involvement in media production and programming exist with YSU Athletics (http://www.yusports.com) (NCAA D1: sports productions), Penguin Rundown (https://www.facebook.com/Penguinnrundown/) (weekly sports web show), The Jambar (YSU’s student newspaper), Light the Wick (https://www.youtube.com/channel/UCPSpmpEDsWylMVZD1AcA/) (arts-based web show), Rookery Radio (http://www.rookeryradio.com) (YSU’s first-ever, internet-only, student-run radio station), and starting in the Fall 2019, Jambar TV.

Our full- and part-time faculty are more than teachers and professors. They are mentors and motivators. Many come with experience from various communication- and media-related industries (e.g., The Vindicator, Cleveland Plain Dealer, ESPN (http://espn.go.com/), WMJ (http://www.wmj.com), WKBN (http://www.wkb.com), WYTV (http://www.wytv.com), NewsRadio 570AM (http://570wkbn.iheart.com/), The Business Journal (https://businessjournaldaily.com/)). They are active practitioners engaged in their disciplines. Most of our faculty have interest in the study of mass media and new media, but other research interests include argumentation and rhetoric, group and organizational communication, interpersonal and intercultural communication.

The department’s home office is located in Bliss Hall. Here, you will find 400+ students majoring and minoring in department programs, and faculty and administrators with a warm and cheerful environment that put students first. Our facilities include smart classrooms, audio and video labs, media labs, and a full-HD television studio. After completing $1.25 million in renovations in the Fall 2017, we opened our new classroom spaces on the first floor of Meshel Hall (two Mac labs with Adobe Creative Cloud, speech labs, team innovation classroom, WebEx “Classroom of the Future,” etc.). In the Fall of 2019, we open our new Constantini Media Center on the east side of Stambaugh Stadium to support our growing sports media programs.

For more information about the department, including meeting with a faculty member who will help you prepare for the future, contact the department office at (330) 941-3631 or email our department administrative assistant, Ms. Shannon Pope, at skpope@ysu.edu. The department office is located in Bliss Hall, Room 2000.

Programs

Communication Studies, B.A.

Courses in this B.A. degree program provide students with the necessary communication skills for an evolving global marketplace and future career demands. The Communication Studies program deals, in part, with people in conversations in settings that are usually face-to-face, but that are increasingly becoming mediated (such as computer-mediated). Public speaking, media and public relations, persuasion, conflict management, social media, and gender communication are some of the areas students examine in this major. Courses touch on a wide variety of areas including social and political movements, the process of legislation, or new media communication.

Program Tracks

Tracks in the B.A. in Communication Studies include:

- Interpersonal/Organizational track
- Media track
- Persuasion track
- Social Media track

Communication Studies courses address the universal emphasis placed on effective, competent communication skills by employers and recruiters. The core curriculum of 18 credit hours includes courses covering these communication skills. The curriculum is then divided into four unique tracks to better prepare students for a particular career. Each of the tracks is described below. The overriding goal of each track is to challenge each student to explore and apply the many forms of communication:

- Human resources or management careers in profit or nonprofit organizations, or those looking for a general, all-encompassing communication degree, should consider the Interpersonal/Organizational track.
- A career path in media management, media criticism, or public relations and advertising should choose the Media track.
- Careers in pharmaceutical sales, industrial sales, retail and corporate sales, politics, or law (including law school) should choose the Persuasion track.
- Our newest curricular offering focuses on social media management, marketing, literacy, communication, and campaigning. Students interested in these new media options should choose the Social Media track.

Students completing their degree in communication studies are uniquely qualified to enter the job market and compete effectively throughout their careers for advancement and promotion.

Through course offerings and applied learning experiences, the communication studies program combines a rich liberal arts emphasis with a much needed specialized professional and career focus for undergraduate students.

Admission Policy for Communication Studies

To major in communication studies, entering freshmen may simply declare a communication studies major. Transfer students must have a GPA of 2.00 and be in “good academic standing.” Students are expected to meet with an advisor prior to registration and are encouraged to meet with an advisor when they have questions or concerns, and to monitor progress.

Journalism, B.A.

The B.A. in Journalism curriculum is divided into three unique tracks to better prepare for particular careers:

- Journalism Studies track
- Broadcast and Digital Media track
- Sports Information and Media track

Information is power. Society must have professionals who can supply people with the information they need to make decisions about their lives and their futures. At Youngstown State University, we believe in the importance of journalism to society and to democracy. We believe that journalists have the power to shape the world.

Guided by this philosophy, YSU’s journalism major gives you a balance of practical and theoretical experience. We teach you to ask tough questions, to uncover and interpret information, to write leads, to conduct interviews, and to work with technologies to deliver the news in multiple platforms from print to broadcast to podcast. We also encourage you to think critically about the stories you report and the impact they will have on communities and society in general.

The journalism program trains students for entry-level positions in reporting, editing, and newspaper design. The curriculum is a blend of courses that support this goal, such as news reporting, editorial and opinion writing, feature writing, editing and design for newspapers, a journalism practicum (journalism workshop) in which students write for the student newspaper, and courses designed to enhance editing, writing and publishing skills. Journalism majors are encouraged to declare minors that support their specific career objectives, such as public relations, photography, political science, telecommunications, or art/design.

Why Journalism?

There has never been a better time to study journalism.
With the explosion of available information, people now need and want credible information. They need what journalists do and there are more venues now than at any other point in history for how to disseminate that information.

Be prepared. This is not the journalism of yesterday. While still loyal to the basic principles of giving people accurate and reliable information that they need to make decisions about their lives, journalism has changed in how news is delivered.

Ink and newsprint are virtually obsolete. Instead, you will be telling stories with video cameras and still cameras and you will be getting story tips from readers and linking to other people’s reporting. The world of modern journalism is all about innovation and entrepreneurial spirit.

**Why Journalism at YSU**

At Youngstown State University, we understand the importance of journalism in society.

With a hands-on teaching philosophy and a strong belief in practical experience, YSU journalism instructors train students for careers in journalism. We also train students to be entrepreneurial in their thinking about how to apply their journalistic skills. From the basics of news judgment to more sophisticated ethical decisions, YSU journalism majors graduate with the skills to land jobs, build careers and most importantly, report important stories in all media platforms.

We keep close watch on trends in the industry and are always eager for ways to integrate new ideas and technologies into what we teach. We are also deeply committed to innovation and experimentation. We work hard to help our students gain professional experience and routinely help them get their work broadcast or published by local, state and national media.

Reporters and editors from numerous legacy and new media organizations, from *The Vindicator* and *The New York Times* to ProPublica and WFMJ Television, offer us regular feedback about our program and what we need to be offering students.

**Admission Policy for journalism**

To major in journalism, entering freshmen may simply declare a journalism major. Transfer students must have a GPA of 2.00 and be in “good academic standing.” Students are expected to meet with an advisor prior to registration and are encouraged to meet with an advisor when they have questions or concerns, and to monitor progress.

**Telecommunication Studies, B.A.**

Tracks are clusters of required and elective courses within your major to develop a specific focus of study or a particular set of media skills. There are two tracks in the B.A. degree program in telecommunication studies:

- **Media Arts track**
- **Sports Broadcasting track**

Telecommunication Studies (TCOM) at YSU is a dynamic, cutting edge baccalaureate program comprising about 125 majors and 12 full- and part-time faculty. We focus on the messages that bombard us every day — through advertising, television and film, news, the internet, magazines, friends, family and more. We study how to make those messages, how to package and distribute them, and how to profit from them.

Our program addresses human communication that passes through some medium such as television, radio or the Internet. For example, in this area, students study how the Internet impacts traditional forms of broadcast media (i.e., radio, television). Students learn about early stages of the field, as well as contemporary combinations of telecasting through the Internet. Courses in the TCOM curriculum provide students with an in-depth knowledge and intellectual challenge in electronic communication. Students receive practical orientation to the skills and techniques of broadcasting. Students explore contemporary theories and problems which are central to media, as well as examine new communication media.

From a liberal arts perspective, the TCOM curriculum is designed to aid the student in pursuit of careers not only in broadcasting but also in recently expanding avenues of communication such as non-commercial broadcasting, corporate communication, industrial communication, cablecasting, and independent production. Internships are available in media organizations to students of superior academic achievement.

**Program Tracks**

Your degree program will comprise several clusters of requirements:

- **General Education**, which helps you learn the core knowledge for a college education and to master the skills you’ll need to be effective in learning at advanced levels.
- **Major and Minor**, where you develop mastery of your main interest areas. Also, you study at levels far above that in any other course area.

You’ll find two types of courses in your major. Some are regular classroom courses where you develop your intellectual knowledge and skill. Others are applied or studio courses that help you master your media performance, production or business skills. As noted above, there are two tracks in the B.A. degree program in telecommunication studies: Media Arts and Sports Broadcasting. Students select one of those two tracks after completing Pre-Telecommunication Studies requirements (see Admission Policy below).

**Admission Policy for teleCommunication Studies**

Students who declare an intent to major in telecommunication studies, whether on the media arts track or sports broadcasting track, will be assigned to the "Pre-Telecommunication" (Pre-TCOM) category. To become a Pre-TCOM major, entering freshmen may simply declare a Pre-TCOM major. Transfer students must have a GPA of 2.00 and be in "good academic standing".

Upon completion of 15 semester hours while in the Pre-TCOM category, and completion of ENGL 1550, TCOM 1570 OR 1580, and TCOM 1581 (with grades of A or B in all three), students will be reassigned to the "Telecommunication Studies" (TCOM) category and track of choice (media arts OR sports broadcasting).

Students may transfer to the Pre-TCOM, but not TCOM, category from another program at YSU or from another institution. Students who have completed associate- or bachelor-level degrees also may enter the Pre-TCOM, but not TCOM, category. Upon completion of 15 semester hours while in the Pre-TCOM category and completion of ENGL 1550, TCOM 1570 OR 1580, and TCOM 1581 (with grades of "A" or "B" in all three), students will be reassigned to the TCOM category.

Students who have interrupted their attendance at YSU for three consecutive semesters or more will be assigned to the Pre-TCOM category upon return (even if the student was a TCOM major). After completion of 15 semester hours while in the Pre-TCOM category, and completion of ENGL 1550, TCOM 1570 OR 1580, and TCOM 1581 (with grades of "A" or "B" in all three), students will be reassigned to the TCOM category.

**Chair**

Amy Graban Crawford, Ph.D., Professor, Chair

Professor

Shelley Blundell, Ph.D., Assistant Professor

Rebecca M. L. Cumalia, Ph.D., Professor

Adam C. Earnheardt, Ph.D., Professor
Mary Beth Earnhardt, Ph.D., Professor
Walter T. Mathews, Ph.D., Associate Professor
Daniel J. O’Neill, Ph.D., Professor
Alfred W. Owens, Ph.D., Professor
Jeffrey L. Tyus, Ph.D., Professor
Cary Wecht, Ph.D., Professor
Lecturer
Paul Ditchey, M.Ed., Lecturer
Elyse Gessler, M.A., Lecturer
Max V. Grubb, Ph.D., Senior Lecturer
Jaietta Jackson, M.A., Senior Lecturer
Dorian Mermer, M.A., Senior Lecturer

Majors

Bachelor of Arts in Communication Studies

- Social Media Track (p. 594)
- Interpersonal/Organizational Track (http://catalog.ysu.edu/undergraduate/colleges-programs/college-business-administration/department-communication/undergraduate/colleges-programs/college-business-administration/department-communication/ba-communication-studies-interpersonal-organizational-track/)
- Media Track (p. 591)
- Persuasion Track (p. 592)

Bachelor of Arts in Journalism

- Bachelor of Arts in Journalism (p. 596)
- Bachelor of Arts in Journalism Broadcast and Digital Media Track (p. 598)
- Bachelor of Arts in Journalism Sports Information and Media Track (p. 599)

Bachelor of Arts in Telecommunication Studies

- Media Arts Track (http://catalog.ysu.edu/undergraduate/colleges-programs/college-creative-arts-communication/department-communication/ba-telecommunication-studies-classic-track/)
- Sports Broadcasting Track (http://catalog.ysu.edu/undergraduate/colleges-programs/college-creative-arts-communication/department-communication/ba-telecommunication-studies-sports-broadcasting-track/)

Minors

- Minor in Communicating in Diverse Organizations (http://catalog.ysu.edu/undergraduate/colleges-programs/college-creative-arts-communication/department-communication/minor-communicating-diverse-organizations/)
- Minor in Communication Studies (http://catalog.ysu.edu/undergraduate/colleges-programs/college-creative-arts-communication/department-communication/minor-communication-studies/)
- Minor in Interpersonal Communication (http://catalog.ysu.edu/undergraduate/colleges-programs/college-creative-arts-communication/department-communication/minor-interpersonal-communication/)
- Minor in Journalism Studies (http://catalog.ysu.edu/undergraduate/colleges-programs/college-creative-arts-communication/department-communication/minor-journalism/)
- Minor in Magazine and Specialty Reporting (http://catalog.ysu.edu/undergraduate/colleges-programs/college-creative-arts-communication/department-communication/minor-magazine-and-specialty-reporting/)
- Minor in Social Media Campaigns (http://catalog.ysu.edu/undergraduate/colleges-programs/college-creative-arts-communication/department-communication/minor-social-media-campaigns/)
- Minor in Sports Information (http://catalog.ysu.edu/undergraduate/colleges-programs/college-creative-arts-communication/department-communication/minor-sports-information/)
- Minor in Telecommunication Studies (http://catalog.ysu.edu/undergraduate/colleges-programs/college-creative-arts-communication/department-communication/minor-telecommunication-studies/)

CMST 1545 Communication Foundations 3 s.h.
Theories, strategies, and skills for competent participation in interpersonal, group, and public communication situations. Application exercises in interpersonal, group, and public communication.
Prereq.: Qualified to take ENGL 1550.

CMST 2600 Communication Theory 3 s.h.
The study of significant theories of communication that reflect the diversity of communication studies and address different communication contexts: interpersonal, group, public, organizational, and mass.
Gen Ed: Social Science.

CMST 2610 Intercultural Communication 3 s.h.
The study of key historical and contemporary theories that affect communication across cultural boundaries. Exercises for improving communication skills in intercultural communication situations are included.
Gen Ed: Domestic Diversity, Social and Personal Awareness.

CMST 2630 Social Media Literacy 3 s.h.
Analyze and evaluate social media communication in its variety of forms. Includes message evaluation, digital media curating, ethics and privacy.

CMST 2645 Presentational Speaking 3 s.h.
In-depth examination of the theory and practice of preparing and delivering presentations in today’s work environment. Emphasis on using technology aids during presentations.
Prereq.: CMST 1545 or equivalent.

CMST 2650 Rhetoric of Film 3 s.h.
Conceptual examination and critical analyses of film including mythic, feminism, Marxist, auteur, genre, and rhetorical perspectives.
Prereq.: ENGL 1551.

CMST 2655 Communication in Groups and Organizations 3 s.h.
Introduction to theories and concepts relating to group and organizational communication effectiveness with practical career applications.

CMST 2656 Interpersonal Communication 3 s.h.
An examination of the skills necessary to develop, maintain, and evaluate one-to-one relationships. Through practical experiences from everyday life, the class examines what occurs when one person communicates with another.

CMST 3700 Designing Communication Research 3 s.h.
A study of the processes involved in designing both qualitative and quantitative communication research projects. Communication research design and implementation.
Prereq.: 15 s.h. of Communication Studies including CMST 2600, and ENGL 1551.

CMST 3717 Intro to Media Relations Campaigns 3 s.h.
An experiential, service-learning course in designing and implementing Media Relations campaigns.
Prereq.: CMST 1545.

CMST 3740 Social Media Communication 3 s.h.
Examination of applications and strategies for communicating through social media, including managing personal and professional social media messages, social media content development, and dissemination.
Prereq.: CMST 2630.
CMST 3745 Individual Studies 1-3 s.h.
Student selects a special problem or issue in communication to research in detail under the direction of a faculty member, pending department committee approval. Repeatable to 6 hrs.
Prereq.: Junior standing.

CMST 3746 Presentational Speaking 3 s.h.
Prereq.: CMST 1545 or equivalent.

CMST 3747 Film Analysis: A Rhetorical Perspective 3 s.h.
Audience and critical rhetorical analysis of films. Approaches include Mythic Genre, Auteur, Feminist, and Marxist with a focus on the rhetorical dimensions of the various perspectives. Prereq. or.
Prereq.: ENGL 1551.
Coreq.: CMST 1545.

CMST 3750 Gender Communication 3 s.h.
Principal concepts and issues of gender and communication as they apply to identity, and communication within and between the genders in a variety of contexts.
Prereq.: CMST 1545.

CMST 3754 Argumentation 3 s.h.
Developing critical thinking through systematic evaluation of theories, principles, and practices of argumentation.
Prereq.: CMST 2600.

CMST 3756 Interviewing 3 s.h.
Theories of communication applied to interview situations with a special concern for developing student understanding of and skills needed to participate in one-to-one and panel interviews.
Prereq.: CMST 1545 and junior standing.

CMST 3757 Media Relations Writing 3 s.h.
A lecture-lab course in writing pamphlets, advertisements, newsletters, and websites for media relations campaigns.
Prereq.: ENGL 1551.

CMST 4850 Social Media Campaigns 3 s.h.
Integrated media campaign development using social media applications; theory and practice of social media campaign lifecycles including inception, implementation, and evaluation of client-based projects.
Prereq.: CMST 1545 and junior standing.

CMST 4851 New Communication Media 3 s.h.
New media histories, technologies, and cultures. Considers promising future forms, and includes issues of authorship, community, identity, interactivity, visuality, the nature and power of technology, intelligent systems, and artificial life.
Prereq.: CMST 2600 and junior standing.

CMST 4855 Interpersonal Communication Relationships 3 s.h.
Theories of relationship development, maintenance and termination. The impact of face-to-face and mediated communication on interpersonal relationships.
Prereq.: CMST 2600 and CMST 2656 and junior standing.

CMST 4859 Organizational Cultures 3 s.h.
Analysis of organizational cultures. Relationships between organizational culture and communication in modern organizations.
Prereq.: CMST 2655 and junior standing.

CMST 4879 Sports Communication Message Design 3 s.h.
Integrated media campaign development using theory and practice of communication. Students will explore lifecycles of sports information campaigns including inception, implementation, and evaluation of projects.
Prereq.: CMST 2600.

CMST 4896 Internship 3 s.h.
An application of communication theories and practice within organizational settings. Weekly meetings with faculty supervisor are required. Weekly field work is 15 hours. May be repeated to a maximum of 6 s.h.
Prereq.: CMST 2655, junior standing, major in Communication Studies, and approval of Internship Proposal form.

CMST 4898 Media Analysis 3 s.h.
Application of methods of analysis to describe and critique the content of various types of media, including new media, news media, and entertainment media. Emphasis on the relationship between media content, uses, and effects.
Prereq.: CMST 3700.

CMST 4899 Senior Project 3 s.h.
Synthesis of research, writing, and presentation skills through the completion of a communication research project and professional development activity. Repeatable to a maximum of 6 s.h. Grading is Traditional/PR.
Prereq.: Senior standing, major in Communication Studies, 24 s.h. of communication studies major complete, including CMST 3700 or CMST 3799.
Gen Ed: Capstone.

CMST 4899A Senior Project: Focus Groups and Interviews 3 s.h.
Synthesis of research, writing, and presentation skills through the completion of a communication research project and professional development activity. Repeatable to a maximum of 6 s.h. Grading is Traditional/PR.
Prereq.: Senior standing, major in Communication Studies, 24 s.h. of communication studies major complete, including CMST 3700 or CMST 3799.

CMST 4899B Senior Project: Surveys and Experiments 3 s.h.
Synthesis of research, writing, and presentation skills through the completion of a communication research project and professional development activity. Repeatable to a maximum of 6 s.h. Grading is Traditional/PR.
Prereq.: Senior standing, major in Communication Studies, 24 s.h. of communication studies major complete, including CMST 3700 or CMST 3799.

CMST 4899C Senior Project Focus Groups and Interviews 3 s.h.
Synthesis of research, writing, and presentation skills through the completion of a communication research project and professional development activity. Repeatable to a maximum of 6 s.h. Grading is Traditional/PR.
Prereq.: Senior standing, major in Communication Studies, 24 s.h. of communication studies major complete, including CMST 3700 or CMST 3799.

CMST 4899D Senior Project Surveys and Experiments 3 s.h.
Synthesis of research, writing, and presentation skills through the completion of a communication research project and professional development activity. Repeatable to a maximum of 6 s.h. Grading is Traditional/PR.
Prereq.: Senior standing, major in Communication Studies, 24 s.h. of communication studies major complete, including CMST 3700 or CMST 3799.

CMST 5852 Conflict Management and Negotiation 3 s.h.
An in-depth analysis of the theories and variables influencing conflict management, resolution, and negotiation. Includes strategies and skills for meditation and arbitration.
Prereq.: CMST 2600 or CMST 6900.

CMST 5860 Persuasion and New Media 3 s.h.
Introduction to persuasion theory and application of theory to new communication media.
Prereq.: CMST 2600 and CMST 3700 or graduate status.

CMST 5889 Theory of Sports and Communication 3 s.h.
CMST 5889. An overview of sports and communication, their symbiotic relationship and the social, cultural, and political impact of that relationship.
Prereq.: CMST 2600 or TCOM 1570 and senior standing, or permission of instructor.

CMST 5898 Seminar 3 s.h.
A cooperative exploration of topics in communication studies. May be repeated up to 6 s.h.
Prereq.: CMST 2600.

CMST 5898P Seminar Streaming Video and Content Creation 3 s.h.
A cooperative exploration of topics in communication studies. May be repeated up to 6 s.h.
Prereq.: CMST 2600.

CMST 5898Q Seminar Study Abroad Ghana 3 s.h.
A cooperative exploration of topics in communication studies. May be repeated up to 6 s.h.
Prereq.: CMST 2600.
CMST 5898R Seminar: Subcultures in America 3 s.h.
A cooperative exploration of topics in communication studies. May be repeated up to 6 s.h. 3 s.h.
Prereq.: CMST 2600.
CMST 5898S Seminar: Political Communication 3 s.h.
May be repeated up to 6 s.h.
Prereq.: CMST 2600.
CMST 6900 Introduction to Graduate Study 1 s.h.
Orientation to teaching, learning, and research in the communication discipline for new graduate students.
CMST 6945 Communication for the Classroom Teacher 3 s.h.
The study of communication theory and practice appropriate for the prospective classroom teacher. Theories and application exercises focus on interpersonal communication, group communication, and classroom speaking.
CMST 6950 Computer Mediated Communication Research 3 s.h.
Theory, research, and application of CMC including examination of computer communication theories and relevant research methodologies, web design theory and critiques, blogging, podcasting, e-mailing, social media, multimedia storytelling. Design, implementation, and evaluation of CMC.
CMST 6953 Group Dynamics: Theory and Research 3 s.h.
Theory and research of group processes, critical thinking and creativity strategies, theory of group leadership and teamwork, conflict management and mediation, advanced group decision-making and problem solving, motivational strategies.
CMST 6957 Organizational Communication Research 3 s.h.
Applies theories of organizational communication to a chosen organization. Culminates with report and presentation.
CMST 6970 Internship 3 s.h.
Communication-related work in a non-academic professional setting.
Prereq.: Completion of the MA core courses.
CMST 6980 Applied Research Methods 3 s.h.
Introduction to and application of qualitative research methods relevant to business communication settings.
CMST 6990 Measurement and Analysis 3 s.h.
Research processes using social scientific, quantitative methodologies and practical experience in conducting research. Essential skill development in research design, measurement, data collection and data analysis.
CMST 6991 Communication Problems: Independent Study 3 s.h.
Individual study and practical application of communication research problems to various organizational, group and mediated communication problems.
CMST 6994 Capstone 3 s.h.
Applied research paper on a communication topic. Oral presentation required. For non-thesis option students only. Thesis option students should take CMST 6995: Thesis.
Prereq.: Completion of the MA core courses.
CMST 6995 Thesis 1-6 s.h.
Research study on an applied communication topic. Oral presentation required. Total of 6 s.h. required for the MA thesis option. For thesis option students only. Non-thesis option students should take CMST 6994: Capstone.
Prereq.: Completion of the MA core courses.
JOUR 2600 Investigative Reporting Workshop 1 s.h.
Students become part of a team of reporters. The program will identify one reporting project that will be the focus of this laboratory. The project will be reported until completion. Students are expected to participate in gathering and analyzing information and in the writing and/or production of stories. Repeatable for up to 3 s.h.
JOUR 2602 Media Writing 3 s.h.
Introduction to writing for the mass media. Development of writing techniques and examination of styles and approaches used in writing for various mass audiences. Fulfills requirement for Integrated Language Arts Middle Childhood teaching license.
Prereq.: Completion of ENGL 1551 with grade "C" or better.
JOUR 2603 Journalism Ethics and Social Responsibilities 3 s.h.
Examination of ethical standards and moral theories and their practical application in professional journalism through case studies. Students will learn to become active critics of media professionals.
Gen Ed: Arts and Humanities.
JOUR 2605 Journalism as Literature 3 s.h.
Examination of literary works by journalists. Study of journalism techniques transferred to literary storytelling.
Gen Ed: Arts and Humanities.
JOUR 2624 Imaging and Design of Media 3 s.h.
Focus on the use of photographs, graphics, tables, charts, and other visual products to convey messages. Includes study of basic visual literacy, design principles and technology. Crosslisted as ENGL 2624.
JOUR 2626 American Journalism 3 s.h.
The development of journalism in America, the role of the news media and its effects on American society, and special consideration of journalism as a tool of diversity and as a literary tradition.
Prereq.: Completion of ENGL 1550 with a "C" or better.
JOUR 2632 Introduction to Photojournalism 3 s.h.
The basics of photojournalism, including composition, lighting, editing, news judgment, and ethics.
JOUR 3716 Magazine Publishing 3 s.h.
Introduction to the fundamentals of publishing in the magazine industry. Review of history and present state of magazine publishing, business models and general vs. specialized audience publications; includes basic feature writing, design techniques and publication strategies.
Prereq.: JOUR 3725 or JOUR 2622, and JOUR 2624.
JOUR 3717 Editorial and Opinion Writing 3 s.h.
Techniques, approaches and practice in writing reviews, editorials, and opinion columns. Exercises in criticisms of the arts, editorial research, and editorial style.
Prereq.: JOUR 2622 or JOUR 3725.
JOUR 3720L Magazine Journalism Workshop 1 s.h.
Working for campus publications to apply news gathering and reporting skills. Emphasis on organizational culture of magazines. Coursework may require travel for reporting projects. May be repeated for up to 3 s.h.
Prereq.: JOUR 3716 or consent of instructor.
JOUR 3721L Journalism Workshop 3 s.h.
Application of the principles of news reporting skills in student media. May be repeated once.
Prereq.: JOUR 2622 or JOUR 3725.
JOUR 3722L Radio News Workshop 3 s.h.
Production of news and feature stories to be aired on radio; development of interview and media production skills for news. Coursework may require travel for reporting projects.
Prereq.: JOUR 2622 or JOUR 3725.
JOUR 3723 Advanced Journalism Editing and Design 3 s.h.
Application of visual literacy and editing skills. Emphasis on editorial decision making, journalistic style editing, quantitative reasoning, fact-checking, and practice of traditional and multimedia design techniques.
Prereq.: JOUR 2622 or JOUR 3725 and JOUR 2624.
JOUR 3725 News Reporting 1 3 s.h.
Study of news reporting and writing, with emphasis on journalistic and AP style, development of news judgment, interviewing, and storytelling through traditional and new media. Coursework may require travel for reporting projects.
Prereq.: completion of JOUR 2624 or ENGL 1551 with a grade of "C" or better.
JOUR 3726 American Journalism 3 s.h.
The development of journalism in America, the role of the news media and its effects on American society, and special consideration of journalism as a tool of diversity and as a literary tradition.
Prereq.: Completion of ENGL 1550 or JOUR 2624 with a C or better.

JOUR 3758 Projects in Working Class Reporting 3 s.h.
Collaboration with the Center for Working Class Studies. Emphasis on using journalistic techniques to cover issues important to working-class people. Coursework may require travel for reporting projects.
Prereq.: ENGL 1551.

JOUR 3759 Sports Journalism 3 s.h.
Techniques of sports reporting with emphasis on game reporting, sports features, columns, photography and new media storytelling. Coursework may require travel for reporting projects.
Prereq.: JOUR 2622 or JOUR 3725 or consent of instructor.

JOUR 3760 News Reporting 2 3 s.h.
Focus is on advanced news reporting and storytelling skills. Includes in-depth coverage of feature writing, investigative, and enterprise journalism. Coursework may require travel for reporting projects.
Prereq.: JOUR 2622.

JOUR 3761 New Media Journalism 3 s.h.
Prereq.: JOUR 2622 or JOUR 3725 and JOUR 2624.

JOUR 3762 Political Reporting 3 s.h.
Development of skills necessary to report, write, record, and publish stories about the American political system. Coursework may require travel for reporting projects.
Prereq.: JOUR 2622 or JOUR 3725.

JOUR 3768 Journalism Individual Studies 1-3 s.h.
Student selects a package of stories to research, report and produce under the direction of a faculty member, pending approval by the faculty member. Multimedia storytelling is encouraged. Repeatable to 6 hrs.
Prereq.: Junior standing or permission of instructor.

JOUR 3769 Principles and Practices of Sports Information 3 s.h.
This course explores the history, development, trends and responsibilities involved in creating and disseminating messages related to sports teams and players, special emphasis on the relationship between journalism and sports information distribution. This course will examine the fundamental components of sports information and storytelling and discuss ethics in relation to sports messaging, player identity and audience relationships.
Prereq.: JOUR 2624.

JOUR 4821 Advising Student Media 3 s.h.
Study of the role and responsibilities of the media advisor in high school and college. Topics include the unique legal and ethical concerns of student media, the training of student staff, the relationship of the student press to the academic administration, and publication-management concerns. Listed also as ENGL 4821.
Prereq.: JOUR 2622 or JOUR 3725 or ENGL 3741.

JOUR 4822 Magazine Writing and Reporting 3 s.h.
In-depth study of writing and reporting techniques for magazine journalists. Emphasis on learning freelance skills, getting work published, and marketing yourself as a magazine writer. Coursework may require travel for reporting projects.
Prereq.: JOUR 3725 or JOUR 2622, and JOUR 2624.

JOUR 4823 In-Depth Reporting 3 s.h.
Emphasis on extended research, extensive interviewing and investigative reporting techniques. Coursework may require travel for reporting projects.
Prereq.: JOUR 2622 or JOUR 3725.

JOUR 4824 Press Law and Ethics 3 s.h.
Study of First Amendment rights of the press; examination of laws concerning libel, privacy, copyright, obscenity, censorship, open meetings and open records in Ohio; discussion of press responsibilities.
Prereq.: JOUR 2622 or JOUR 3725 and Junior standing.

JOUR 4825 Selected Topics in Journalism 3 s.h.
Study of approaches to and special aspects of journalism not covered in depth in other journalism courses. May be repeated once with change of topic.
Prereq.: JOUR 2622 or JOUR 3725.

JOUR 4825P Selected Topics in Journalism Streaming Video and Content Creation 3 s.h.
Study of approaches to and special aspects of journalism not covered in depth in other journalism courses. May be repeated once with change of topic.
Prereq.: JOUR 2622 or JOUR 3725.

JOUR 4860 News Reporting 2 3 s.h.
Focus is on advanced news reporting and storytelling skills. Includes in-depth coverage investigative, and enterprise journalism.
Prereq.: JOUR 2622 or JOUR 3725.

JOUR 4893 Journalism Senior Project 3 s.h.
Capstone experience for journalism major. Individualized enterprise/investigative reporting projects with demonstration of advanced news gathering techniques. Coursework may require travel for reporting projects.
Prereq.: Senior standing; and JOUR 3760 or JOUR 4860 and JOUR 4824.
Gen Ed: Capstone.

JOUR 4894 Journalism Internship 3 s.h.
Supervised journalism work experience. Students complete 60 hours for each hour registered. Internship placement is selective. Coursework may require travel for reporting projects. May be repeated with the approval of the department chairperson for up to 6 hours.
Prereq.: JOUR 3721L and junior standing and 2.5 GPA.

JOUR 4899 Sports Information Internship 1-3 s.h.
Sports Information Internship. Supervised work-and-learning experiences in sports information under the direction of a faculty member and an employee of a participating outside organization. Students complete 40 hours for each hour registered. Internship placement is selective. May be repeated with the approval of the department chairperson for total of 6 hours.
Prereq.: JOUR 3759; junior standing.

TCOM 1500 Orientation to Telecommunication Studies 1 s.h.
Survey of University and Department programs, policies, practices and facilities with particular emphasis on needs of telecommunication studies majors. Creation of telecommunication studies portfolio materials and other aspects of the Telecommunication Studies program. To be taken prior to TCOM 2682 and TCOM 2683.

TCOM 1510 Sports Field Production 1 1 s.h.
Assignment to one or more production crews in conjunction with YSU Athletics and Horizon League Sports. Student responsibilities will be determined in light of skills and interests, as well as the production need. May be repeated.

TCOM 1555L Radio Workshop 3 s.h.
Application of the principles of radio production and broadcasting skills in student media.

TCOM 1570 Introduction to Electronic Sports Media 3 s.h.
A study of the electronic sports media as business and social forces; attention given to how media and sport industries grew as consorts into the Sports Media complex, basic legal and ethical considerations for sports media practitioners; the various platforms through which sports media content is offered; electronic sports media roles and careers; and the social implications of the electronic sports media.

TCOM 1580 Introduction to Telecommunication Studies 3 s.h.
A survey course designed to familiarize students with the principles and practices involved in radio and television broadcasting, cable, and other electronic communication systems.
TCOM 1581 Telecommunication Technologies 2 s.h.
Operational principles of audio, data, and video telecommunication technologies. One hour lecture and two hours lab per week.

TCOM 1595 Media Literacy and Culture 3 s.h.
This course offers a critical survey of the role played by mass communication in shaping culture. Individual media institutions are examined in terms of the information they distribute, the entertainment they provide, and the influence they exercise. Special attention is paid to the audience-medium relationship and the concept of media literacy.

TCOM 2610 Sports Field Production 2 1 s.h.
Assignment to one or more production crews in conjunction with YSU Athletics and Horizon League Sports. Student responsibilities will be determined in light of skills and interests, as well as the production need. May be repeated.
Prereq.: TCOM 1510.

TCOM 2682 Scriptwriting for Electronic Media 3 s.h.
Fundamentals of telecommunication media writing with emphasis on the theory analysis and practices in the preparation of continuity, news, and documentaries.
Prereq.: TCOM 1570 or TCOM 1580; TCOM 1581; and ENGL 1550 with a grade of "C" or better in all.

TCOM 2683 Media Operations and Performance 3 s.h.
An introduction of practices and procedures basic to media production facilities. The equivalent of three hours lecture and two hours lab per week.
Prereq.: TCOM 1580 and ENGL 1550 with a grade of "C" or better in both.

TCOM 2684 Broadcast News Practices 3 s.h.
Organization, preparation, and presentation of radio and television news programs. Includes study of journalistic requirements of broadcast media and broadcast newsroom operation. The equivalent of three hours lecture and two hours lab per week.
Prereq.: TCOM 2682 and TCOM 2683 with a grade of "C" or better in both.

TCOM 3710 Sports Field Production 3 1 s.h.
Assignment to one or more production crews in conjunction with YSU Athletics and Horizon League Sports. Student responsibilities will be determined in light of skills and interests, as well as the production need. May be repeated.
Prereq.: TCOM 2610.

TCOM 3780 Principles and Practices of Media Announcing 3 s.h.
A study of the announcer's role in electronic mass media. Examination of theories, techniques, and major styles of media announcing. Three hours lecture, two or more hours of individual lab per week.
Prereq.: TCOM 2682 and TCOM 2683 with a grade of "C" or better in both; major in Telecommunication Studies.

TCOM 3781 Audio Production 3 s.h.
Study of the concepts of audio production, including student production of various types of programs. The equivalent of three hours lecture and two hours lab per week.
Prereq.: TCOM 2682 and TCOM 2683 with a grade of "C" or better in both; major in Telecommunication Studies.

TCOM 3782 Video Production 1 3 s.h.
Study of studio production elements such as equipment, lighting, scene design, graphics, and special effects. The equivalent of three hours lecture and two hours lab per week.
Prereq.: TCOM 2682 and TCOM 2683 with a grade of "C" or better in both; major in Telecommunication Studies.

TCOM 3783 Telecommunications Regulation 3 s.h.
Responsibilities of electronic media communicators as prescribed by law and administrative agency policies, and court decisions. Analysis of the regulatory environment of broadcasters, common carriers, and cable.
Prereq.: TCOM 2682 and TCOM 2683 with a grade of "C" or better in both; major in Telecommunication Studies.

TCOM 3784 Telecommunication Programming 3 s.h.
A study of contemporary broadcast and cable programming, including development, scheduling, and competitive strategies.
Prereq.: TCOM 2682 and TCOM 2683 with a grade of "C" or better in both; major or minor in Telecommunication Studies.

TCOM 3786 Video Production 2 3 s.h.
Study and application of television production elements and editing. Production values of composition, transition, and sequence explored from a communication perspective. Students produce field-based productions. Three hours lecture, two hours lab.
Prereq.: TCOM 3782.

TCOM 3787 Practicum in Telecommunication 1-3 s.h.
Individual study and practical application of communication principles to various telecommunication problems. Repeatable to a maximum of 6 s.h.
Prereq.: TCOM 2682 and TCOM 2683 with a grade of "C" or better in both.

TCOM 3789 Electronic Media Interviewing 3 s.h.
A study and application of interviewing and reporting techniques, emphasizing the local news interview and public affairs reporting. The equivalent of three hours lecture and two hours lab per week.
Prereq.: TCOM 2682 and TCOM 2683 with a grade of "C" or better in both.

TCOM 3790 Broadcast News Lab 3 s.h.
Study and lab in news programs for TV, radio and web. Requirements of broadcast media and newsroom operation. Students create the weekly webcast, Light the Wick, or similar content. Two hours lecture and two hours lab per week.
Prereq.: JOUR 2622 or TCOM 2682 or TCOM 2683.

TCOM 3791 Electronic Media Sales and Promotion 3 s.h.
An examination of the principles and practices of selling electronic media. Analysis of rating-based sales and promotion strategies, as well as relations with agencies and station representatives. The equivalent of three hours lecture and two hours lab per week.
Prereq.: TCOM 2682 and TCOM 2683 with a grade of "C" or better in both.

TCOM 3792 Broadcast Sports Producing and Writing 3 s.h.
A study of the fundamentals of producing broadcast sports media content, including script development and line producing.
Prereq.: TCOM 1570, TCOM 2682, TCOM 2683 with a grade of "C" or better.

TCOM 3793 Broadcast Sports Performance 3 s.h.
Students receive instruction on play-by-play announcing and on the preparation and extemporaneous discussion of player and team statistics as well as other appropriate sports-related information. Skills for conducting media interviews.
Prereq.: TCOM 1570, TCOM 2682, TCOM 2683.

TCOM 3794 Cross-platform Sports Broadcasting 3 s.h.
Examination of and instruction in new media technologies to deliver sports media content. Emphasis on how the interactive nature of online content changes traditional notions of presentation and distribution.
Prereq.: TCOM 1570, TCOM 2682, TCOM 2683.

TCOM 3795 Sports Media Production 1 3 s.h.
Theory and practice of remote radio and television sports production for volleyball, soccer, and baseball. Students produce and direct coverage of sporting events. Meets equivalent of 2 hours lecture plus 4 hours field lab per week. May be repeated once.
Prereq.: TCOM 1570, TCOM 2682, TCOM 2683.

TCOM 4850 Advanced Audio/Video Production and Editing 3 s.h.
Advanced techniques and procedures in audio/video production. Techniques include digital editing and video post-production procedures. Recognize current video and audio technology and how to troubleshoot problems associated with such technology.
Prereq.: TCOM 3781 or TCOM 3782 with a grade of "C" or better.
TOM 4881 Telecommunication Management 3 s.h.
A study of the relationships of communication management with government, networks, ownership and other groups. Organization and procedures of typical units; common planning models.
Prereq.: TOM 2682 and TOM 2683 with a grade of "C" or better in both; major or minor in Telecommunication Studies.

TOM 4882 Studio Operations Management 3 2 s.h.
Advanced individual projects or assignments in planning, coordinating and assessing production and programming related to studio procedures. Repeatable for a maximum of 4 s.h.
Prereq.: TOM 3785; acceptance of Project Proposal Form by coordinating faculty member and department chairperson.

TOM 4884 Video Production Direction 3 s.h.
A study and application of the communication roles and skills associated with video directing. Emphasis on audience analysis. The equivalent of three hours lecture and two hours lab per week.
Prereq.: TOM 3782.

TOM 4885 Developments in Telecommunication Media 3 s.h.
Study and application of uses of telecommunication media apart from commercial broadcasting. Study of new technologies and their potential.
Prereq.: TOM 2682 and TOM 2683 with a grade of "C" or better in both.

TOM 4886 Audience and Market Measure 3 s.h.
Methods of collecting, analyzing, and using information about media markets. Includes quantitative and non-quantitative techniques.
Prereq.: TOM 2682 and TOM 2683 with a grade of "C" or better in both.

TOM 4887 Theories and Criticisms of Telecommunication 3 s.h.
Study of contemporary theories and research in telecommunication.
Prereq.: TOM 2682 and TOM 2683 with a grade of "C" or better in both; major or minor in Telecommunication Studies.

TOM 4888 Internship Telecommunication 3 s.h.
An application of telecommunication theory and practices within organizations primarily concerned with telecommunication. Students are selected on the basis of special qualifications, including GPA, courses taken, and competitive interview. Enrollment is contingent on the availability of internship positions. Twenty hours a week.
Prereq.: Junior standing in telecommunication and permission of internship coordinator.

TOM 4889 Broadcast Sports Internship 3 s.h.
An application of sports media theory and practices within sports and sports media organizations such as university, semi-professional and professional organizations.
Prereq.: TOM 1570, TOM 3792, TOM 3793, TOM 3794, and TOM 3795; selection by sponsoring organization.

TOM 4890 Producing Broadcast News 3 s.h.
Supervision of news programs for TV, radio and web. Story development, shooting/editing, script management, graphics creation, studio operations, and on-camera performance. Creation and marketing of the webcast, Light the Wick, or equivalent. Two hours lecture and two hours lab per week.
Prereq.: TOM 3790.

TOM 4897 Seminar in Telecommunication 3 s.h.
Designed to investigate contemporary aspects of telecommunications. May be repeated for credit if topic is different.
Prereq.: TOM 2682 and TOM 2683 with a grade of "C" or better in both; major in Telecommunication Studies.

TOM 4897E Seminar in Telecommunication Zombie Raccoons of the Mahoning Valley 3 s.h.
Designed to investigate contemporary aspects of telecommunications. May be repeated for credit if topic is different.
Prereq.: TOM 2682 and TOM 2683 with a grade of "C" or better in both; major in Telecommunication Studies.

TOM 4897P Seminar in Telecommunication Streaming Video and Content Creation 3 s.h.
Designed to investigate contemporary aspects of telecommunications. May be repeated for credit if topic is different.
Prereq.: TOM 2682 and TOM 2683 with a grade of "C" or better in both; major in Telecommunication Studies.

TOM 4899 Capstone 2 s.h.
Students demonstrate mastery of knowledge in a variety of degree assessment areas. Students prepare and present a portfolio of their work. The course assists students in assembling and presenting the portfolio to department faculty and other interested parties. To be taken after achieving senior status as a Telecommunications Studies major.
Prereq.: senior status in Telecommunication Studies.
Gen Ed: Capstone.

Bachelor of Arts in Communication Studies, Interpersonal/Organizational Track

Overview
Our combination of interpersonal and organizational courses provides students with practical skills relevant to traditional and emerging workplace settings as well as personal skills that employers value highly.

Interpersonal communication courses introduce one-to-one communication behaviors and the impact of those behaviors on personal relationships. Through a blend of theory and practice, students are encouraged to develop confidence and ability as ethical communicators; to view communication events from multiple perspectives; to understand the multicultural character of communication in contemporary society; to analyze and evaluate variables operating in verbal transactions; and to probe the basic problems of human communication in order to understand self, others, and events.

The organizational communication courses enable you to not only increase your understanding of communication and its impact on complex organizations, but also to enhance your effectiveness as a member of various organizations. Organizational communication courses within this track focus on a plethora of skills which will allow you to hone your abilities as a communicator in the business context and guide you through society's changing career demands.

This track includes skills you will need for success in various interviewing scenarios. By learning employee, performance and persuasive interviewing skills, you will be more adept at seeking the proper job, meeting a client’s needs, and performing more effectively within an organization. Enacting problem-solving techniques, adapting to different conflict management styles, learning group member roles, trying on different leadership styles, recognizing and adapting to changing organizational cultures, and learning about effective superior-subordinate communication styles are but a few of the skills you will acquire which will also enhance the success of both you and your organization in classes such as organizational cultures (CMST 4859) and conflict management and negotiation (CMST 5852). Organizational communication courses provide you with an abundance of applicable skills which will transcend the various positions, stages of employment, and organizational types you may experience in today's dynamic job market.

This track also includes courses which will expand your interpersonal skills. These courses include intercultural communication (CMST 2610) and gender communication (CMST 3750). Intercultural communication focuses on the application of theory and research about intercultural communication to provide you with an intellectual framework that allows the description and understanding of communication between culturally heterogeneous individuals. It also helps you to develop communication skills that improve competence in intercultural communication situations. In the gender communication course, you will learn concepts and issues of femininity and
masculinity as they apply to communication between and among genders in a variety of contexts.

**Possible Careers**

- Human resource specialist
- Graduate programs (masters, doctoral degree)
- Training and development specialist
- Internal communication specialist
- Organizational training & development
- Labor negotiator/recruiter
- Section/branch manager
- Regional manager
- Store manager
- Product buyer
- Community affairs coordinator
- Government affairs coordinator
- Account representative
- Retail salesperson
- Real estate salesperson
- Insurance salesperson
- Career development specialist
- Business analyst
- Corporate communications manager
- Student advising/recruitment

**Complementary Minors**

- Accounting
- Business
- Languages
- General Sociology
- Human Geography
- Human Resources
- Social Work
- Loss Prevention & Asset Protection
- Management Information Systems
- Nonprofit Leadership
- Professional Ethics
- Psychology
- Social Institutions

Students majoring in communication studies must successfully complete all core courses and one of the specified tracks for a total of 39 semester hours in CMST. Students must complete 18 credits of 3000- and 4000-level courses in the CMST major. Students must also complete all requirements for a Bachelor of Arts degree, including the completion of an approved academic minor.

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<tr>
<th>COURSE</th>
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<tbody>
<tr>
<td>YSU 1500</td>
<td>Success Seminar</td>
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<td>or SS 1500</td>
<td>Strong Start Success Seminar</td>
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<td>or HONR 1500</td>
<td>Intro to Honors</td>
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**General Education Requirements**

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<tbody>
<tr>
<td>ENGL 1550</td>
<td>Writing 1</td>
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<td>or ENGL 1549</td>
<td>Writing 1 with Support</td>
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<td>ENGL 1551</td>
<td>Writing 2</td>
<td>3</td>
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<tr>
<td>CMST 1545</td>
<td>Communication Foundations</td>
<td>3</td>
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<td>Mathematics Requirement (e.g., MATH 2623, STAT 2625)</td>
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<td>Arts and Humanities (6 s.h.)</td>
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<td>Elementary Foreign Language</td>
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<td>FNLG 2600</td>
<td>Intermediate Foreign Language</td>
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**Foreign Language Requirement**

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<td>CMST 2600</td>
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<td>CMST 2630</td>
<td>Social Media Literacy</td>
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<td>CMST 2656</td>
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**Interpersonal/Organizational Track**

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<td>CMST 5852</td>
<td>Conflict Management and Negotiation</td>
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**Electives (note that students must complete 39 hours of upper division courses; 37xx and above)**

**Minor Requirements (note that some minors require more than 18 credits)**

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<td>or ENGL 1549</td>
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<tr>
<td>NS XXXX Natural Science GER + lab</td>
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**Total Semester Hours**

120-122

**Year 1**

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**Year 2**

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<td>SS XXXX Social Sciences GER</td>
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</table>
LEARNING OUTCOMES

Regardless of track, students graduating with a B.A. degree in communication studies will:

- differentiate between key theories and concepts in communication
- find, interpret, evaluate, and synthesize academic research in communication studies
- demonstrate verbal and nonverbal competence

Students completing their degree in communication studies are uniquely qualified to enter the job market and compete effectively throughout their careers for advancement and promotion.

Through course offerings and applied learning experiences, the communication studies program combines a rich liberal arts emphasis with a much needed specialized professional and career focus for undergraduate students.

Bachelor of Arts in Communication Studies, Media Track

Overview

Our Media Track was developed in conjunction with new courses in media relations, media relations campaigns, and media analysis. The goal of this track is to provide students with practical, hands-on experience with media relations applications and strategies, new media technologies, and current and emerging mass communication practices. This track provides professional skills in media management and public relations. You will be introduced to old and new technologies as well as more challenging issues related to research of new communication technologies.

Media analysis (CMST 4898) will teach you to critically analyze media messages; explore how political, social, and economic forces affect media messages; and discuss how media content affects media users. In media relations writing (CMST 3757) and media relations campaigns (CMST 3717), you will learn how to write press releases and ad content for different types of media and how to plan and implement a public relations, marketing, and advertising campaign using a variety of mass media outlets. Because media relations campaigns and information technology skills are often applied in business settings, you will take a course in organizational cultures (CMST 4859) to prepare you to use your media skills in diverse organizational settings.

Possible Careers

- Advertising
- Agent (e.g., sports, entertainment)
- Web Designer/ Director
- Writer
- Community Relations
- News Service Researcher
- Public Relations Manager
- Market Research
- Information Management
- Media Buyer/ Ad Sales
- Audience/ Media Research

Complementary Minors

- Advertising/ Public Relations
- Art & Technology
- Language
- Graphic Design
- Information Systems Programming
- Integrated Technologies
- Journalism
- Management Information Systems
- Marketing
- Multimedia and Web Design
- Photography
- Professional and Technical Writing
- Telecommunication Studies

Students majoring in communication studies must successfully complete all core courses and one of the specified tracks for a total of 39 semester hours in CMST. Students must complete 18 credits of 3000- and 4000-level courses in the CMST major. Students must also complete all requirements for a Bachelor of Arts degree, including the completion of an approved academic minor.
Bachelor of Arts in Communication Studies, Persuasion Track

LEARNING OUTCOMES
Regardless of track, students graduating with a B.A. degree in communication studies will:

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Bachelor of Arts in Communication Studies, Persuasion Track

Overview
Our Persuasion Track is designed for students interested in careers that involve a great deal of personal interaction and influence. Courses of
Complementary Minors

- Political Science
- Journalism

### Possible Careers

- Speech Writer
- Political Consultant
- Political Debate Coach
- Political Analyst
- Public Relations
- Advertising
- Lobbyist
- Commentator
- Consumer Advocate
- Press Secretary
- Book Publicist
- Campaign Manager
- Community Relations
- Ministry
- Legislator
- Motivational Speaker
- Account Representative
- Communication Consultant
- Forensics Coach
- Fundraiser
- Spokesperson
- Lawyer
- Business-to-Business Sales

Courses on this track include the core communication courses as well as intercultural communication, presentational speaking, interviewing, argumentation, persuasion, social media campaigns, and new communication media. Classes in presentational speaking, argumentation, and persuasion will develop your public speaking skills beyond the basic skills learned in CMST 1545. Social media and new communication media will prepare you for advancements in communication specifically related to the use of new media for persuasion.

In addition to learning how to present ideas effectively in person-to-person and mediated contexts, students also learn skills relevant to persuading people and developing arguments, which will prove to be essential in careers in sales, customer service/relations, marketing and/or advertising. In intercultural communication, students will learn how to effectively adapt to culturally diverse audiences when preparing and delivering persuasive messages.

This degree prepares students for several career paths (see below), but also leads students to advanced areas of study. For example, graduate study in communication will prepare you for a life of research and teaching in areas such as argumentation (and debate), persuasion, and public speaking. Students who choose this track are often prepared for a Master’s in Business Communication (MBA). The MBA, coupled with a B.A. degree in communication studies with an emphasis on persuasion, is useful in many industries, especially the corporate setting. The persuasion track will prepare you for law school, or for public service in government and politics. Other students may choose this track in preparation for divinity school which, in turn, can lead to a career as a religious leader. Additionally, students who earn a communication degree with an emphasis on persuasive skills are qualified for many sales and marketing positions.

### Possible Careers

- Marketing
- Advertising/Public Relations
- Psychology
- Criminal Justice
- Human Geography
- Nonprofit Leadership
- Social Institutions
- Public Administration
- Telecommunication Studies
- Foreign Affairs

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### Course Listing

#### First Year Requirement - Student Success

<table>
<thead>
<tr>
<th>COURSE</th>
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<th>S.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>YSU 1500</td>
<td>Success Seminar</td>
<td>1-2</td>
</tr>
<tr>
<td>or SS 1500</td>
<td>Strong Start Success Seminar</td>
<td></td>
</tr>
<tr>
<td>or HONR 1500</td>
<td>Intro to Honors</td>
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#### General Education Requirements

| ENGL 1550 | Writing 1                  | 3-4  |
| or ENGL 1549 | Writing 1 with Support    |      |
| ENGL 1551 | Writing 2                  | 3    |
| CMST 1545 | Communication Foundations  | 3    |
| Mathematics Requirement (e.g., MATH 2623, STAT 2625) | 3 |
| Arts and Humanities (6 s.h.) | 6 |
| Natural Sciences (2 courses, 1 with lab) (6-7 s.h.) | 7 |
| Social Science (6 s.h.) | 6 |
| Social and Personal Awareness (6 s.h.) | 6 |

#### Foreign Language Requirement

| Foreign Language 1550 | 4 |
| Foreign Language 2600 | 4 |

#### Major Requirements

| CMST 2600 | Communication Theory       | 3 |
| CMST 2630 | Social Media Literacy      | 3 |
| CMST 2655 | Communication in Groups and Organizations | 3 |
| CMST 2656 | Interpersonal Communication | 3 |
| CMST 3700 | Designing Communication Research | 3 |
| CMST 4899 | Senior Project             | 3 |

#### Persuasion Track

| CMST 2610 | Intercultural Communication | 3 |
| CMST 2645 | Presentational Speaking     | 3 |
| CMST 3754 | Argumentation               | 3 |
| CMST 3756 | Interviewing                | 3 |
| CMST 4850 | Social Media Campaigns      | 3 |
| CMST 4851 | New Communication Media     | 3 |
| CMST 5860 | Persuasion and New Media    | 3 |

#### Minor Requirements (note that some minors require more than 18 credits) 18

#### Electives (note that students must complete 39 hours of upper division courses; 37xx and above) 17

### Total Semester Hours

120-122

### Year 1

#### Fall S.H.

| YSU 1500 | Success Seminar | 1 |
| CMST 1545 | Communication Foundations | 3 |
Bachelor of Arts in Communication Studies, Social Media Track

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<td>CMST 2656</td>
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<td>ENGL 1551</td>
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**Learning Outcomes**

Regardless of track, students graduating with a B.A. degree in communication studies will:

- differentiate between key theories and concepts in communication
- find, interpret, evaluate, and synthesize academic research in communication studies
- demonstrate verbal and nonverbal competence

Students completing their degree in communication studies are uniquely qualified to enter the job market and compete effectively throughout their careers for advancement and promotion.

Through course offerings and applied learning experiences, the communication studies program combines a rich liberal arts emphasis with a much needed specialized professional and career focus for undergraduate students.

### Bachelor of Arts in Communication Studies, Social Media Track

#### Overview

Social media management requires a unique set of skills that take students far beyond traditional communication and media production proficiency. However, our social media track does more than just prepare graduates to competently use leading social media platforms like Facebook, Twitter, and Instagram. Beyond learning the general functionality of social media, students learn to employ ethical standards for communicating with social media while applying their own moral standards. Students on this track explore the dangers of social media, and the importance of setting social media policies for the workplace.

With the appropriate support courses and possible minor options, the social media track prepares students for communicating and marketing with social media, including effective use of interactive designs. Students can learn to examine the social press and how to share client and personal expertise and experiences with the online world, how to use social tools for collaborative work, and how to distinguish the characteristics and methods, advantages and pitfalls, of virtual communities, social photos and videos, collective intelligence, crowd-sourcing, social production, and wiki collaboration.

#### Possible Careers

- Communications Director
- Consumer Media Experience
- Content Marketing Manager
- Digital and Social Media Strategist
- Digital and Social Analytics
- Internet Marketing Director
- Multimedia and Content Producer
- Online Community Manager
- Public Relations Manager
- Social Influencer Manager
- Social Media Manager, Producer
- Social Media Sales

#### Complementary Minors

- Advertising and Public Relations
- Business
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| ENGL 1550 | Writing 1 | 3-4 |
| or ENGL 1549 | Writing 1 with Support | |
| ENGL 1551 | Writing 2 | 3 |
| CMST 1545 | Communication Foundations | 3 |
| Mathematics Requirement (e.g., MATH 2623, STAT 2625) | 3 |
| Arts and Humanities (6 s.h.) | 6 |
| Natural Sciences (2 courses, 1 with lab) (6-7 s.h.) | 7 |
| Social Science (6 s.h.) | 6 |
| Social and Personal Awareness (6 s.h.) | 6 |

**Foreign Language Requirement**

| Foreign Language 1550 | 4 |
| Foreign Language 2600 | 4 |

**Major Requirements**

| CMST 2600 | Communication Theory | 3 |
| CMST 2630 | Social Media Literacy | 3 |
| CMST 2655 | Communication in Groups and Organizations | 3 |
| CMST 2656 | Interpersonal Communication | 3 |
| CMST 3700 | Designing Communication Research | 3 |
| CMST 4899 | Senior Project | 3 |

**Social Media Track**

| JOUR 2624 | Imaging and Design of Media | 3 |
| CMST 3717 | Intro to Media Relations Campaigns | 3 |
| CMST 3740 | Social Media Communication | 3 |
| CMST 3757 | Media Relations Writing | 3 |
| CMST 4850 | Social Media Campaigns | 3 |
| CMST 4851 | New Communication Media | 3 |

| CMST 5860 | Persuasion and New Media | 3 |

**Minor Requirements (note that some minors require more than 18 credits)**

| ENGL 1550 | Writing 1 | 3-4 |
| or ENGL 1549 | Writing 1 with Support | |
| MATH XXXX | Approved General Education | 3 |
| AH XXXX | Arts & Humanities | 3 |
| NS XXXX | Natural Science GER + lab | 4 |

**Electives (note that students must complete 39 hours of upper division courses; 37xx and above)**

**Total Semester Hours**

120-122

**Year 1**

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<tr>
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| Spring |
| CMST 2600 | Communication Theory | 3 |
| CMST 2630 | Social Media Literacy | 3 |
| CMST 2656 | Interpersonal Communication | 3 |
| ENGL 1551 | Writing 2 | 3 |
| SPA XXXX GER | Social & Personal Awareness | 3 |
| Semester Hours | 15 |

**Year 2**

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| Spring |
| JOUR 2624 | Imaging and Design of Media | 3 |
| Minor Course | 3 |
| AH XXXX GER | Arts & Humanities | 3 |
| SS XXXX GER | Social Sciences | 3 |
| FNLG 2600 | Intermediate Foreign Language | 4 |
| Semester Hours | 16 |

**Year 3**

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<tr>
<td>Semester Hours</td>
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| Spring |
| CMST 3757 | Media Relations Writing | 3 |
| CMST 4850 | Social Media Campaigns | 3 |
| Minor Course | 3 |
| Upper-division Minor Course | 3 |
| GER XXXX General Education Elective | 3 |
| Semester Hours | 15 |

**Year 4**

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</table>
Bachelor of Arts in Journalism

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Complementary Minors

- Advertising and Public Relations
- American Politics
- Business
- Communication Studies
- Creative Writing
- Criminal Justice System or Juvenile Justice System
- Digital Media or Graphic Design (for Non-Art Majors)
- Economics
- Entrepreneurship
- Marketing
- Multimedia and Web Design
- Photography (for Non-Art Majors)
- Professional and Technical Writing
- Public Health
- Social Media Campaigns
- Statistics
- Web Communications

LEARNING OUTCOMES

Regardless of track, students graduating with a B.A. degree in communication studies will:

- differentiate between key theories and concepts in communication
- find, interpret, evaluate, and synthesize academic research in communication studies
- demonstrate verbal and nonverbal competence

Students completing their degree in communication studies are uniquely qualified to enter the job market and compete effectively throughout their careers for advancement and promotion.

Through course offerings and applied learning experiences, the communication studies program combines a rich liberal arts emphasis with a much needed specialized professional and career focus for undergraduate students.

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**Required Support Courses**

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<th>Course</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>CMST 3756</td>
<td>Interviewing</td>
<td>3</td>
</tr>
<tr>
<td>CMST 4850</td>
<td>Social Media Campaigns</td>
<td>3</td>
</tr>
<tr>
<td>or CMST 3740</td>
<td>Social Media Communication</td>
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</tr>
</tbody>
</table>

**Support Required Elective Courses**

Select two of the following or any JOUR upper division courses: 6

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>ENGL 3740</td>
<td>Advanced Writing</td>
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<tr>
<td>ENGL 3743</td>
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<tr>
<td>ENST 2600</td>
<td>Foundations of Environmental Studies</td>
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<tr>
<td>POL 3702</td>
<td>Law and Society</td>
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<tr>
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</tr>
<tr>
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<td>State and Local Government</td>
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<tr>
<td>TCOM 1580</td>
<td>Introduction to Telecommunication Studies</td>
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<tr>
<td>CSIS 1510</td>
<td>Global Electronic Information Resources</td>
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<td>CJFS 2601</td>
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<tr>
<td>CJFS 2602</td>
<td>Criminal Courts</td>
<td></td>
</tr>
<tr>
<td>STAT 2601</td>
<td>Introductory Statistics</td>
<td></td>
</tr>
</tbody>
</table>

**Minor Requirements (some minors require more than 18 credits)** 18

Electives (students must complete 39 hours of upper division courses; 37xx and above) 9

**Total Semester Hours** 120-123

1 Be sure to choose those that are appropriate for your selected option.
   - WR indicates class suitable for writing/reporting option,
   - MG indicates class suitable for magazine option,
   - E indicates class suitable for electronic option,
   - JS indicates classes suitable for the journalism studies option.

Please see your advisers for help with scheduling.

### Course 1

#### Year 1

**Fall**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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</tr>
</thead>
<tbody>
<tr>
<td>JOUR 2624</td>
<td>Imaging and Design of Media</td>
<td>3</td>
</tr>
<tr>
<td>FNGL 1550</td>
<td>Elementary Foreign Language</td>
<td>4</td>
</tr>
<tr>
<td>YSU 1500</td>
<td>Success Seminar</td>
<td>1-2</td>
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<tr>
<td>or SS 1500</td>
<td>Strong Start Success Seminar</td>
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<tr>
<td>or HONR 1500</td>
<td>Intro to Honors</td>
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<tr>
<td>MATH XXXX</td>
<td>Approved General Education</td>
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**Semester Hours** 11-12

#### Spring

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<tr>
<td>JOUR 3726</td>
<td>American Journalism</td>
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<tr>
<td>CMST 1545</td>
<td>Communication Foundations</td>
<td>3</td>
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<tr>
<td>ENGL 1551</td>
<td>Writing 2</td>
<td>3</td>
</tr>
<tr>
<td>FNGL 2600</td>
<td>Intermediate Foreign Language</td>
<td>4</td>
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<tr>
<td>AH XXXX</td>
<td>GER Arts &amp; Humanities</td>
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**Semester Hours** 16

#### Year 2

**Fall**

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</tr>
<tr>
<td>JOUR Elective</td>
<td>(see Journalism Electives list below)</td>
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</table>

**Semester Hours** 15

### Journalism Electives

Select four of the following (or a total of 12 s.h.):

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<tr>
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<td>JOUR 2605</td>
<td>Journalism as Literature</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 2632</td>
<td>Introduction to Photojournalism</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 3716</td>
<td>Magazine Publishing</td>
<td>3</td>
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<td>JOUR 3717</td>
<td>Editorial and Opinion Writing</td>
<td>3</td>
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<tr>
<td>JOUR 3720L</td>
<td>Magazine Workshop</td>
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<td>JOUR 3722L</td>
<td>Radio News Workshop</td>
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<tr>
<td>JOUR 3758</td>
<td>Projects in Working Class Reporting</td>
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</tr>
<tr>
<td>JOUR 3759</td>
<td>Sports Journalism</td>
<td>3</td>
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**Semester Hours** 15
Bachelor of Arts in Journalism, Broadcast and Digital Media Track

The B.A. in Journalism track in broadcast and digital media prepares students for entry-level positions in media production, reporting and writing. The curriculum offers a blend of courses from journalism and telecommunications to support this goal. Course will focus on writing and reporting, video production, professional practices and legal issues. Students are encouraged to build a strong publication and production portfolio by working for our award winning campus media outlets which include The Jambar, the Penguin Review, the *yo magazine (http://www.thejambar.com/category/yo-magazine/), The Jenny, Rookery Radio (http://www.rookeryradio.com/), and thejambar.com. Internships and opportunities are available at local and national media outlets. Additionally, Journalism majors on the broadcast and digital media track are encouraged to declare minors that support their specific career objectives, and allow them to develop complementary skills and knowledge (students on this track are prohibited from minoring in telecommunication studies because of the wide overlap in requirements). Students who are interested in pursuing a career in writing or print journalism should explore the B.A. Journalism.

Elective Support Courses

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<table>
<thead>
<tr>
<th>COURSE</th>
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<tr>
<td>ACCT 2602</td>
<td>Financial Accounting</td>
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<td>CJFS 2601</td>
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- What constitutes news.
- Practical applications of First Amendment.
- Strategies for finding and extracting news.
- Writing stories for various audiences and media formats.
- The principles and practices of ethical and professional news.

Bachelor of Arts in Journalism, Sports Information and Media Track

The B.A. in Journalism prepares students for positions in media production, reporting, editing and design. There are three tracks for students majoring in journalism, Journalism Studies (JS), broadcast and digital media (BDM), and sports information and media (SIM). The curriculum offers a blend of courses to support this goal. The coursework begins with basic photo, video, writing, reporting and visual literacy skills. These are then followed by courses that focus on design, and advanced reporting and writing projects. Students in the broadcast and digital media track will take several courses in broadcast news and telecommunication. Those in journalism will take a series of electives and interdisciplinary courses, to build skills in interviewing, writing, social media and specialized journalism. Students in Sports Information and Media will take courses in sports journalism and communication.

On-campus outlets for student writing and productions include the *Penguin Review*, the *yo magazine*, *The Jenny*, *Rookery Radio*, and *thejambar.com*. Internships and other writing opportunities are available at local media outlets including local TV, radio and newspapers. *The Business Journal*, *The Vindicator*, and the *Tribune Chronicle*. Additionally, Journalism Studies and Broadcast and Digital Media majors are encouraged to declare minors that support their specific career objectives, such as public relations, political science, and Digital Media majors are encouraged to declare minors that support their specific career objectives, such as public relations, political science, and telecommunication. Those in journalism will take a series of electives and interdisciplinary courses, to build skills in interviewing, writing, social media and specialized journalism. Students in Sports Information and Media will take courses in sports journalism and communication.

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Bachelor of Arts in Telecommunication Studies, Media Arts Track

Overview

The media arts track prepares students to produce and deliver content that passes through some medium such as television, radio, or the Internet. For example, on this track, students may study how content created for the Internet and social media (e.g., YouTube) impacts traditional forms of broadcast media such as radio and television. Students learn about early stages of the field as well as contemporary combinations of telecasting.
through various media outlets. A major in the telecommunication studies-media arts track curriculum provides students with an in-depth knowledge and intellectual challenge in electronic communication. Students receive practical orientation to the skills and techniques of broadcasting. Further, students explore contemporary theories and problems central to mass media, as well as examine new communication media.

From a liberal arts perspective, the telecommunication studies-media arts track curriculum is designed to aid the student in pursuit of careers not only in broadcasting but also in recently expanding avenues of communication such as non-commercial broadcasting, corporate communication, industrial communication, cablecasting, and independent production. Internships are available are regionally based, national and international media organizations.

Possible Careers
- Audio producer, director, editor
- Camera operator
- Content producer
- Digital media producer, director, editor
- On-air host
- Media sales
- Media management
- Multimedia producer
- Radio DJ
- Social media manager
- Video blogger (vlogger)
- Video producer, director, editor

Complementary Minors
- Advertising and Public Relations
- Business
- Computer Databases
- Computer Networking
- Computer Science
- Creative Writing
- Digital Media
- Electronic Commerce Tech
- Entrepreneurship
- Graphic Design
- Interactive Design
- Journalism
- Magazine and Specialty Reporting
- Management
- Marketing
- Multimedia and Web Design
- Multimedia Reporting
- Photography
- Professional Writing and Editing
- Social Media Campaigns
- Web Communications

Admission Policy
Students who declare an intent to major in telecommunication studies, whether on the media arts track or sports broadcasting track, will be assigned to the "Pre-TCOM" category. Upon completion of 15 semester hours while in the Pre-TCOM category, and completion of ENGL 1550, TCOM 1570 OR 1580, and TCOM 1581 (with grades of "A" or "B" in all three), students will be reassigned to the TCOM category.

Students who have interrupted their attendance at YSU for three consecutive semesters or more will be assigned to the Pre-TCOM category upon return (even if the student was a TCOM major). After completion of 15 semester hours while in the Pre-TCOM category, and completion of ENGL 1550, TCOM 1570 OR 1580, and TCOM 1581 (with grades of "A" or "B" in all three), students will be reassigned to the TCOM category.

Students may transfer to the Pre-TCOM, but not TCOM, category from another program at YSU or from another institution. Students who have completed associate- or bachelor-level degrees also may enter the Pre-TCOM, but not TCOM, category. Upon completion of 15 semester hours while in the Pre-TCOM category, and completion of ENGL 1550, TCOM 1570 OR 1580, and TCOM 1581 (with grades of "A" or "B" in all three), students will be reassigned to the TCOM category.

General Education Requirements
- ENGL 1550 Writing 1
- or ENGL 1549 Writing 1 with Support
- ENGL 1551 Writing 2
- CMST 1545 Communication Foundations
- Mathematics Requirement (e.g., MATH 2623, STAT 2625)
- Arts and Humanities (6 s.h.)
- Natural Sciences (2 courses, 1 with lab) (6-7 s.h.)
- Social Science (6 s.h.)
- Social and Personal Awareness (6 s.h.)

Foreign Language Requirement
- Foreign Language 1550
- Foreign Language 2600

Major Requirements
- TCOM 1500 Orientation to Telecommunication Studies
- TCOM 1580 Introduction to Telecommunication Studies
- TCOM 1581 Telecommunication Technologies
- TCOM 2682 Scriptwriting for Electronic Media
- TCOM 2683 Media Operations and Performance
- TCOM 3780 Principles and Practices of Media Announcing
- TCOM 3781 Audio Production
- or TCOM 3782 Video Production 1
- TCOM 3783 Telecommunications Regulation
- TCOM 4887 Theories and Criticisms of Telecommunication
- TCOM 4897 Seminar in Telecommunication
- TCOM 4899 Capstone

TCOM Electives
- Select a minimum of 11 s.h. of TCOM electives.

Minor Requirements (some minors require more than 18 credits)
- Electives (students must complete 39 hours of upper division courses; 37xx and above)

Total Semester Hours 120-122

Year 1
Fall
- YSU 1500 Success Seminar 1
- ENGL 1550 or ENGL 1549 Writing 1 or Writing 1 with Support 3-4
- MATH XXXX Approved General Education 3
- TCOM 1500 Orientation to Telecommunication Studies 1
Bachelor of Arts in Telecommunication Studies, Sports Broadcasting Track

Overview
The sports broadcasting track was designed to prepare students for the ever-expanding field of sports media. Students on this track have direct access to sports broadcasting opportunities through Youngstown State University Athletics, including NCAA Division I sports, via Horizon League and Missouri Valley Conference (i.e., Penguin football) streams and broadcasts. Students learn the process of preparing content through the pre- and post-production phases as well as evaluation of the content. Courses include Broadcast Sports Producing & Writing, Broadcast Sports Performance, Cross-Platform Sports Broadcasting, Sports Media Production, and Sports Field Production.

Possible Careers
- Camera operator
- Digital media producer, director, editor
- On-air host
- Media sales
- Media management
- Multimedia producer
- Public and media relations
- Radio DJ
- Sports journalist, blogger
- Sports media content producer
- Sports media director, editor
- Social media manager, content creator
- Sports TV/Radio show host, producer
- Sports video blogger (vlogger)
- Video producer, director, editor

LEARNING OUTCOMES
The student learning outcomes for the B.A. degree program in telecommunication studies are as follows:

- The student will construct arguments using basic reasoning skills and avoiding fallacies;
- The student will compose messages using multi-media technology;
- The student will design written, oral, and visual messages to communicate ideas to a specific audience;
- The student will appraise the values, attitudes, and goals of a potential audience using demographic and psychographic variables;
- The student will describe the prevailing theories of electronic media and appraise the relative value of each.
Complementary Minors

- Advertising and Public Relations
- Business
- Creative Writing
- Digital Media
- Electronic Commerce Tech
- Entrepreneurship
- Graphic Design
- Interactive Design
- Journalism
- Magazine and Specialty Reporting
- Management
- Marketing
- Multimedia and Web Design
- Multimedia Reporting
- Photography
- Professional Writing and Editing
- Social Media Campaigns
- Web Communications

Admission Policy

Students who declare an intent to major in telecommunication studies, whether on the media arts track or sports broadcasting track, will be assigned to the "Pre-Telecommunication" (Pre-TCOM) category. Upon completion of 15 semester hours while in the Pre-TCOM category, and completion of ENGL 1550, TCOM 1570 OR 1580, and TCOM 1581 (with grades of "A" or "B" in all three), students will be reassigned to the TCOM category and track of choice (media arts OR sports broadcasting).

Students may transfer to the Pre-TCOM, but not TCOM, category from another program at YSU or from another institution. Students who have completed associate- or bachelor-level degrees also may enter the Pre-TCOM, but not TCOM, category. Upon completion of 15 semester hours while in the Pre-TCOM category, and completion of ENGL 1550, TCOM 1570 OR 1580, and TCOM 1581 (with grades of "A" or "B" in all three), students will be reassigned to the TCOM category.

Students who have interrupted their attendance at YSU for three consecutive semesters or more will be assigned to the Pre-TCOM category upon return (even if the student was a TCOM major). After completion of 15 semester hours while in the Pre-TCOM category, and completion of ENGL 1550, TCOM 1570 OR 1580, and TCOM 1581 (with grades of "A" or "B" in all three), students will be reassigned to the TCOM category.

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<tr>
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<tr>
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<td>Strong Start Success Seminar</td>
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<tr>
<td>or HONR 1500</td>
<td>Intro to Honors</td>
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</table>

General Education Requirements

| ENGL 1550    | Writing 1                    | 3-4  |
| or ENGL 1549 | Writing 1 with Support       |      |
| ENGL 1551    | Writing 2                    | 3    |
| CMST 1545    | Communication Foundations    | 3    |
| Mathematics Requirement (e.g., MATH 2623, STAT 2625) | 3 |
| Arts and Humanities (2 courses) | 6 |
| Natural Sciences (2 courses, 1 with lab) | 6-7 |
| Social Science (2 courses) | 6 |
| Social and Personal Awareness (2 courses) | 6 |

Foreign Language Requirement

| FNLG 1550   | Elementary Foreign Language  | 4    |
| FNLG 2600   | Intermediate Foreign Language| 4    |

Major Requirements

| TCOM 1500  | Orientation to Telecommunication Studies | 1    |
| TCOM 1510  | Sports Field Production 1                 | 1    |
| TCOM 1570  | Introduction to Electronic Sports Media   | 3    |
| TCOM 1581  | Telecommunication Technologies             | 2    |
| TCOM 2610  | Sports Field Production 2                 | 1    |
| TCOM 2682  | Scriptwriting for Electronic Media        | 3    |
| TCOM 2683  | Media Operations and Performance          | 3    |
| TCOM 3710  | Sports Field Production 3                 | 1    |
| TCOM 3783  | Telecommunications Regulation             | 3    |
| TCOM 3792  | Broadcast Sports Producing and Writing    | 3    |
| TCOM 3793  | Broadcast Sports Performance              | 3    |
| TCOM 3794  | Cross-platform Sports Broadcasting        | 3    |
| TCOM 3795  | Sports Media Production 1                 | 3    |
| TCOM 4887  | Theories and Criticisms of Telecommunication | 3 |
| CMST 5889  | Theory of Sports and Communication       | 3    |
| TCOM 4889  | Broadcast Sports Internship               | 3    |
| TCOM 4899  | Capstone                                   | 2    |

TCOM Electives

- Select a minimum of 6 s.h. of TCOM Electives.
- Minor Requirements (some minors require more than 12 credits) 12-18
- Electives to reach 120 hrs (students must complete 39 hours of upper division courses; 37xx and above) 16

Total Semester Hours 120-129

Year 1

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<td>TCOM 3792</td>
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<td>NS XXXX</td>
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</table>

Semester Hours 17-18

Spring

| ENGL 1551 | Writing 2 | 3    |
| CMST 1545 | Communication Foundations | 3 |
| TCOM 1510 | Sports Field Production 1 | 1 |
| TCOM 2682 | Scriptwriting for Electronic Media | 3 |
| TCOM 2683 | Media Operations and Performance | 3 |
| AH XXXX | GER Arts & Humanities | 3 |

Semester Hours 16

Year 2

<table>
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<tbody>
<tr>
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<td>TCOM 3792</td>
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<tr>
<td>SPA XXXX</td>
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<tr>
<td>FNLG 1550</td>
</tr>
<tr>
<td>TCOM 2610</td>
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</table>

Semester Hours 17

Spring

| TCOM 3793 | Broadcast Sports Performance | 3 |

Youngstown State University Undergraduate 603
Minor in Communicating in Diverse Organizations

<table>
<thead>
<tr>
<th>COURSE</th>
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<tbody>
<tr>
<td>CMST 2600</td>
<td>Communication Theory</td>
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</tr>
<tr>
<td>CMST 2655</td>
<td>Communication in Groups and Organizations</td>
<td>3</td>
</tr>
</tbody>
</table>

Minor in Communication Studies

Students interested in improving their communication skills should consider one of four minors in communication studies. The minors focus on different areas of communication and each one will help you develop a different skill set. These skills are in high demand by employers and recruiters and include interpersonal communication, intercultural communication, social media communication and campaigns, and conflict management and negotiation.

MINOR IN COMMUNICATION STUDIES

<table>
<thead>
<tr>
<th>COURSE</th>
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</tr>
</thead>
<tbody>
<tr>
<td>CMST 2600</td>
<td>Communication Theory</td>
<td>3</td>
</tr>
</tbody>
</table>

Select one of the following:

- CMST 2630 Social Media Literacy
- CMST 2655 Communication in Groups and Organizations
- CMST 2656 Interpersonal Communication

Select four CMST upper-division courses (3700 and above) 12

Total Semester Hours 18

Minor in Interpersonal Communication

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
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</tr>
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<tbody>
<tr>
<td>CMST 2600</td>
<td>Communication Theory</td>
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</tr>
<tr>
<td>CMST 2630</td>
<td>Social Media Literacy</td>
<td>3</td>
</tr>
<tr>
<td>CMST 2655</td>
<td>Interpersonal Communication</td>
<td>3</td>
</tr>
</tbody>
</table>

Select three of the following courses (9 s.h.) at least 6 s.h. must be 3700 level or above.

- JOUR 3724 Imaging and Design of Media
- JOUR 3725 News Reporting 1
- JOUR 4824 Press Law and Ethics

Select three of the following courses (9 s.h.) at least 6 s.h. must be 3700 level or above.

- JOUR 2603 Journalism Ethics and Social Responsibilities
- JOUR 2605 Journalism as Literature
- JOUR 3716 Magazine Publishing
- JOUR 3717 Editorial and Opinion Writing
- JOUR 3721L Journalism Workshop
- JOUR 3722L Radio News Workshop

Total Semester Hours 18

Learning Outcomes

The student learning outcomes for the B.A. degree program in telecommunication studies are as follows:

- The student will construct arguments using basic reasoning skills and avoiding fallacies;
- The student will compose messages using multi-media technology;
- The student will design written, oral, and visual messages to communicate ideas to a specific audience;
- The student will appraise the values, attitudes, and goals of a potential audience using demographic and psychographic variables;
- The student will describe the prevailing theories of electronic media and appraise the relative value of each.
Minor in Sports Information

COURSE  | TITLE                          | S.H.
---------|--------------------------------|------
JOUR 3723 | Advanced Journalism Editing and Design | 3
JOUR 3726 | American Journalism             | 3
JOUR 3758 | Projects in Working Class Reporting | 3
JOUR 3759 | Sports Journalism                | 3
JOUR 3761 | New Media Journalism             | 3
JOUR 3762 | Political Reporting              | 3
JOUR 4822 | Magazine Writing and Reporting   | 3
JOUR 4823 | In-Depth Reporting               | 3
JOUR 4825 | Selected Topics in Journalism    | 3
JOUR 4860 | News Reporting 2                 | 3
JOUR 4894 | Journalism Internship            | 3

Total Semester Hours 18

Minor in Magazine and Specialty Reporting

COURSE  | TITLE                          | S.H.
---------|--------------------------------|------
JOUR 2622 | Imaging and Design of Media    | 3
JOUR 2624 | Imaging and Design of Media    | 3
JOUR 3716 | Magazine Publishing            | 3
JOUR 3720L| Magazine Journalism Workshop    | 1
JOUR 3723 | Advanced Journalism Editing and Design | 9
JOUR 3759 | Sports Journalism               | 3
JOUR 3761 | New Media Journalism            | 3
JOUR 3762 | Political Reporting             | 3
JOUR 4822 | Magazine Writing and Reporting  | 3
JOUR 4824 | Press Law and Ethics            | 3
JOUR 4825 | Selected Topics in Journalism   | 3

Total Semester Hours 19

Minor in Social Media Campaigns

COURSE  | TITLE                          | S.H.
---------|--------------------------------|------
CMST 2600 | Communication Theory           | 3
CMST 2630 | Social Media Literacy          | 3
JOUR 2624 | Imaging and Design of Media    | 3
JOUR 3717 | Intro to Media Relations Campaigns | 9
CMST 3740 | Social Media Communication     | 3
CMST 3757 | Media Relations Writing        | 3
CMST 4850 | Social Media Campaigns         | 3
CMST 4851 | New Communication Media        | 3

Total Semester Hours 18

Minor in Telecommunication Studies

Students interested in developing mass communication skills should consider the telecommunication studies minor. The minor focuses on different areas of mass media studies and will help students develop an introductory skill set that would serve as a complementary skill to many different majors. These skills are in high demand by employers and recruiters in a variety of fields. To complete the minor in telecommunication studies, a student must successfully complete 20 s.h. in:

COURSE  | TITLE                          | S.H.
---------|--------------------------------|------
TCOM 1580 | Introduction to Telecommunication Studies | 3
TCOM 1581 | Telecommunication Technologies | 2
TCOM 2682 | Scriptwriting for Electronic Media | 3
TCOM 2683 | Media Operations and Performance | 3
Select three of the following: 9
TCOM 3783 | Telecommunications Regulation | 3
TCOM 3784 | Telecommunication Programming | 2
TCOM 3791 | Electronic Media Sales and Promotion | 3
TCOM 4881 | Telecommunication Management | 3
TCOM 4885 | Developments in Telecommunication Media | 3
TCOM 4886 | Audience and Market Measure | 3
TCOM 4887 | Theories and Criticisms of Telecommunication | 3

Total Semester Hours 22

WCBA Associate Degrees

Professions

- Associate of Arts in Business Administration (p. 605)
- Associate of Technical Study - Business Technology (p. 606)

Associate of Arts in Business Administration

The Williamson College of Business Administration offers an Associate of Arts in Business Administration that incorporates some general education courses, the business tool courses, and some upper level business courses. This degree is often pursued by individuals already in the workforce wanting to enhance their knowledge and skills in the field of business, often leading to promotion and/or salary increase. The courses taken in the Associate of Arts in Business Administration can all be applied to the Bachelor of Science in Business Administration.

CAREER OPPORTUNITIES

An Associate degree in business can prepare students for some entry-level jobs in retail, office administration, bookkeeping, and trade work. The most common careers for individuals earning an AABA degree is in the area of office administration and support. Office administration assistants can be found in a wide array of organizations including corporations, small business centers, government agencies, and nonprofit organizations.

STUDENT EXPERIENCES

Students enrolled in the Associate of Arts in Business Administration have the opportunity to build their knowledge and leadership skills in their field through various student leadership organizations including the American Marketing Association, Advertising Club, Pi Sigma Epsilon, Society for Human Resource Management (SHRM), Enactus, and the Student Nonprofit Leadership Organization.
Associate of Technical Study in Business Technology

The Associate of Technical Study - Business Technology program is designed to provide an opportunity for individuals who have completed documented vocational or technical training to earn academic credit for the training and combine this with academic coursework at the college level to earn an Associate of Technical Study degree.

Students must be enrolled in or have successfully completed a course of technical training that has already been evaluated by YSU. Students may be awarded no more than 30 hours for previous documented technical training.

<table>
<thead>
<tr>
<th>COURSE</th>
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<td>FIRST YEAR REQUIREMENT - STUDENT SUCCESS</td>
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<tr>
<td>YSU 1500</td>
<td>Success Seminar</td>
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<td>GENERAL EDUCATION COURSES</td>
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<tr>
<td>ENGL 1550</td>
<td>Writing 1</td>
<td>3-4</td>
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<tr>
<td>or ENGL 1549</td>
<td>Writing 1 with Support</td>
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<td>ENGL 1551</td>
<td>Writing 2</td>
<td>3</td>
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<tr>
<td>CMST 1545</td>
<td>Communication Foundations</td>
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<tr>
<td>Mathematics</td>
<td>Met through MATH 1552 - See Business Tool Courses</td>
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<tr>
<td>Arts &amp; Humanities (6 SH)</td>
<td>3 SH met through major requirement PHIL 2620 Business Ethics</td>
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<tr>
<td>PHIL 2628</td>
<td>Business Ethics</td>
<td>3</td>
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<tr>
<td>Arts &amp; Humanities Elective</td>
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<tr>
<td>GE: Natural Science (7 SH)</td>
<td>One Science must include a lab</td>
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<td>BUSINESS TOOL COURSES</td>
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<td>Business Tool courses must be completed with the grade of a &quot;C&quot; or higher and cannot be taken credit/no credit.</td>
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<tr>
<td>BUS 1500</td>
<td>Exploring Business</td>
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<td>BUS 2600</td>
<td>Business Applications of Microsoft Excel</td>
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<td>MATH 1552</td>
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<td>ECON 2610</td>
<td>Principles 1: Microeconomics</td>
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<td>ECON 2630</td>
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<td>MGT 2604</td>
<td>Legal Environment of Business</td>
<td>3</td>
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<tr>
<td>ACCT 2602</td>
<td>Financial Accounting</td>
<td>3</td>
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<td>ACCT 2603</td>
<td>Managerial Accounting</td>
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<td>ENGL 3742</td>
<td>Business Writing</td>
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<td>ECON 3788</td>
<td>Statistics for Business and Economics</td>
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<td>BUSINESS CORE COURSES</td>
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<td>To enroll in upper level business courses students must have successfully completed ENGL 1550, ENGL 1551, PHIL 2628, CMST 1545, all Business Tool courses and have a minimum 2.5 overall GPA.</td>
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<td>MGT 3725</td>
<td>Fundamentals of Management</td>
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<td>MKTG 3703</td>
<td>Marketing Concepts and Practice</td>
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Year 1

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<tr>
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<tr>
<td>CMST 1545</td>
<td>Communication Foundations</td>
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<tr>
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<tr>
<td>ENGL 1550 or 1549, ENGL 1551 and all Business Tool courses MUST be completed with the grade of a &quot;C&quot; or higher and cannot be taken credit/no credit.</td>
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<tr>
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<tr>
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<tr>
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<tr>
<td>ACCT 2603</td>
<td>Managerial Accounting</td>
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Approved Journeyman Hours 30
Total Semester Hours 68-70

Maximum of thirty (30) semester hours may be granted to individuals who have completed four years of apprenticeship/journeyman training. Apprenticeships must have the approval of the Bureau of Apprenticeship and Training in the U.S. Department of Labor. In addition, students must successfully complete a minimum of 35 semester hours of course work selected in accordance with the ATS curriculum.

Year 1
Fall
BUS 1500 Exploring Business 3
MATH 1510 College Algebra 4
ENGL 1550 Writing 1 3
CMST 1545 Communication Foundations 3
Semester Hours 13
Spring
ENGL 1551 Writing 2 3
ECON 2610 Principles 1: Microeconomics 3
ACCT 2602 Financial Accounting 3
PHIL 2628 Business Ethics 3
Semester Hours 12

Year 2
Fall
ENGL 3742 Business Writing 3
ACCT 2603 Managerial Accounting 3
MGT 2604 Legal Environment of Business 1 3
BUS 2600 Business Applications of Microsoft Excel 3
Semester Hours 12
Total Semester Hours 37

BSBA International Business (ICP)

WCBA Student Services
(330) 941-2376

INTERNATIONAL BUSINESS (ICP)
The Williamson College of Business Administration offers an Individualized Curriculum Program (ICP) in International Business. This major utilizes the core functional areas (management, marketing, finance, accounting, etc.) of any business or organization to conduct business internationally. Virtually all businesses deal with international suppliers, buyers, or other parties. The International Business major allows students the education and experiences of conducting business with organizations from multiple countries around the globe. This program prepares students to enter a global market and leads to jobs such as import/export agent, translator, foreign currency investment advisor, foreign sales representative, and international management consultant.

Student Leadership Opportunities
Students studying International Business at Youngstown State University have the opportunity to build their knowledge and leadership skills through various student leadership organizations such as the International Business Organization, Beta Gamma Sigma, Enactus, Student Investment Fund, Student Leadership Council, and Student Nonprofit Leadership Organization.

Global Learning Experiences
The Williamson Center for International Business offers short-term study trips lasting approximately 10 days. These are typically offered during class break periods (winter and spring break). WCBA short-term trips have included destinations such as Italy, Ireland, The Czech Republic and China. Students receive three credit hours of course work that can be applied to their degree requirements.

Youngstown State University’s International Studies and Programs offers a wide variety of semester long international study experiences. Study Abroad programs allow a student to live in a foreign country and attend a foreign university. Students are immersed in the culture through the learning experience. WCBA students have studied for a semester at various locations around the world including Italy, Africa, Australia, England, Brazil and Germany.

COURSE TITLE S.H.

GENERAL EDUCATION
Core Competencies
ENGL 1550 Writing 1 3
or ENGL 1549 Writing 1 with Support 3
ENGL 1551 Writing 2 3
CMST 1545 Communication Foundations 3

Mathematics Requirements
Met through MATH 1552 (see Business Tool)

Knowledge Domains
Arts & Humanities 3 SH met through PHIL 2628 required for major
PHIL 2628 Business Ethics 3
Arts & Humanities Elective 3
Natural Sciences One science course must include a lab 7
Social Sciences 3 SH met through REL 2601 required for major
REL 2601 Introduction to World Religions 3
Social & Personal Awareness Elective 3

BUSINESS TOOL COURSES
Business Tool courses must be completed with the grade of a “C” or higher and cannot be taken credit/no credit.
BUS 1500 Exploring Business 3
BUS 2600 Business Applications of Microsoft Excel 3
MATH 1552 Applied Mathematics for Management 4
ECON 2610 Principles 1: Microeconomics 3
ECON 2630 Principles 2: Macroeconomics 3
MGT 2604 Legal Environment of Business 1 3
ACCT 2602 Financial Accounting 3
ACCT 2603 Managerial Accounting 3
ENGL 3742 Business Writing 3
ECON 3788 Statistics for Business and Economics 1 3

BUSINESS CORE COURSES
To enroll in upper level business courses student must have successfully completed ENGL 1550, ENGL 1551, PHIL 2628, CMST 1545, all Business Tool courses and have a minimum 2.5 overall GPA.
Upper level business courses must be completed with the grade of a “C” or higher and cannot be taken credit/no credit.
BUS 3715 Principles of International Business 3
BUS 3700 Business Analytics 3
FIN 3720 Business Finance 3
MKTG 3702 Business Professionalism 1
MKTG 3703 Marketing Concepts and Practice 3
MGT 3725 Fundamentals of Management 3
MGT 3761 Management Information Systems 3
MGT 3789 Operations Management 3
MGT 4850 Strategic Management and Leadership 3

INTERNATIONAL BUSINESS CORE COURSES 12
Select 12 SH from the following: International Business majors are encouraged to participate in at least ONE Global Learning Experience for credit.
BUS 4860 International Business Internship
Certificate in Entrepreneurship

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<td>3</td>
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<tr>
<td>BUS 3750</td>
<td>Business Internship recommended</td>
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**FUNCTIONAL CORE REQUIREMENTS**

Select 12 SH from one of the following areas: ACCT, BUS, ENT, FIN, MGT, MKTG or ECON

**UPPER-LEVEL BUSINESS COURSES**

Select 6 SH of upper level business courses (ACCT, ADV, BUS, ENT, FIN, MGT, MKTG)

**NON-BUSINESS COURSES**

Total Semester Hours 120-121

ENGL 1550, ENGL 1551, Business Tool and upper level business courses must be completed with the grade of a "C" or higher and cannot be taken credit/no credit.

To enroll in upper level business courses students must have successfully completed ENGL 1550, ENGL 1551, PHIL 2628, CMST 1545, all Business Tool courses AND have a minimum 2.5 overall GPA.

Certificate in Entrepreneurship

Contact:

Joe Angelo
jfangelo@ysu.edu

The certificate in Entrepreneurship is designed to provide a broad-based understanding of the entrepreneurial process and the unique problems and challenges faced by new ventures. In recognition of the broad spectrum of start-up concepts, these programs, while housed in the Williamson College of Business Administration, are open to students of all disciplines.

The certificate is designed to serve students who are interested in starting their own company. Innovation, creativity, and opportunity recognition are critical skills necessary for anyone entering the marketplace. Learning these entrepreneurial skills will prepare one for the diverse and ever-changing opportunities that exist throughout the world of business.
Students interested in declaring a certificate in Entrepreneurship need to complete and Intra University Transfer Request form with their academic advisor. Student must meet course prerequisites to enroll in WCBA courses, including a minimum 2.5 overall GPA for upper level business courses. WCBA courses must be completed with the grade of "C" or higher and cannot be taken credit/no credit.

The minor in Entrepreneurship is designed to provide a broad-based understanding of the entrepreneurial process and the unique problems and challenges faced by new ventures. In recognition of the broad spectrum of start-up concepts, these programs, while housed in the Williamson College of Business Administration, are open to students of all disciplines.

The minor is designed to serve students who are interested in starting their own company. Innovation, creativity, and opportunity recognition are critical skills necessary for anyone entering the marketplace. Learning these entrepreneurial skills will prepare one for the diverse and ever-changing opportunities that exist throughout the world of business.

### COURSE	TITLE	S.H.
---
BUS 1500	Exploring Business	3
ENT 3700	Entrepreneurship New Venture Creation	3
ENT 3750	Entrepreneurship-Small Business Financial Management	3
ENT 4800	Entrepreneurship-Business Plan Development	3

Select two of the following:

ENT 4850	Entrepreneurship Internship
ENT 4851	Field Studies in Entrepreneurship
ACCT 1503	Elementary Accounting
ACCT 2602	Financial Accounting
MGT 2604	Legal Environment of Business 1
MKTG 3703	Marketing Concepts and Practice
MGT 3725	Fundamentals of Management

**Total Semester Hours**

18

Students interested in declaring a minor in Entrepreneurship need to complete and Intra University Transfer Request form with their academic advisor. Students must meet course prerequisites to enroll in WCBA courses, including a minimum 2.5 overall GPA for upper level business courses. WCBA courses must be completed with the grade of "C" or higher and cannot be taken credit/no credit.

### Minor in Nonprofit Leadership

The Certificate in Nonprofit Leadership prepares students for an entry-level position in a nonprofit organization. The following courses are required for the Certificate in Nonprofit Leadership:

**COURSE	TITLE	S.H.**
---
ADV 3710	Basic Public Relations	3
BUS 3720	Nonprofit Leadership	3
BUS 3740	Nonprofit Community Service 1	1
BUS 3780	Financial Management and Fundraising for Nonprofit Organizations	3
MGT 3725	Fundamentals of Management	3

**Total Semester Hours**

13

Students interested in declaring a certificate in Nonprofit Leadership need to complete an Intra University Transfer Request form with their academic advisor. Students must meet all course prerequisites to enroll in WCBA courses, including a minimum 2.5 overall GPA for upper level business courses. WCBA courses must be completed with the grade of "C" or higher and cannot be taken credit/no credit.

### Certificate in Nonprofit Leadership

- Evaluate the management of regional nonprofit organizations through the use of case studies.
- Analyze the use of financial information in the management of a nonprofit organization.
- Apply the important role fundraising plays in a nonprofit organization and the various revenue sources sought by nonprofit organizations.
- Understanding of societal needs and how a nonprofit organization meets those needs on a local, national, and/or global level.
- Understanding of basic nonprofit management principles including strategic planning, human resource planning, risk management, and the role of marketing/communications.
- Explore paid and volunteer positions available in the nonprofit sector.
- Create a professional network of nonprofit professionals regionally and beyond.

The Certificate in Nonprofit Leadership prepares students for an entry-level position in a nonprofit organization. The following courses are required for the Certificate in Nonprofit Leadership:

**COURSE	TITLE	S.H.**
---
ADV 3710	Basic Public Relations	3
BUS 3720	Nonprofit Leadership	3
BUS 3740	Nonprofit Community Service 1	1
BUS 3780	Financial Management and Fundraising for Nonprofit Organizations	3
MGT 3725	Fundamentals of Management	3

**Total Semester Hours**

13

Students interested in declaring a certificate in Nonprofit Leadership need to complete and Intra University Transfer Request form with their academic advisor. Students must meet all course prerequisites to enroll in WCBA courses, including a minimum 2.5 overall GPA for upper level business courses. WCBA courses must be completed with the grade of "C" or higher and cannot be taken credit/no credit.

### Minor in International Business

The Nonprofit Leadership minor is geared to any YSU student seeking a four-year degree who is interested in beginning a career in the nonprofit sector and/or serving the community. The minor in Nonprofit Leadership can be earned through successful completion of the following courses:

**COURSE	TITLE	S.H.**
---
BUS 3720	Nonprofit Leadership	3
BUS 3780	Financial Management and Fundraising for Nonprofit Organizations	3
ADV 3710	Basic Public Relations	3
MGT 3755	Managing Workplace Diversity	3
MGT 3725	Fundamentals of Management	3
BUS 3740	Nonprofit Community Service 1	1
BUS 4840	Nonprofit Leadership Internship	3
BUS 4841	Nonprofit Leadership Seminar	1

**Total Semester Hours**

20

All students seeking the Nonprofit Leadership minor must complete a 225 hour internship in a regional nonprofit organization.

Academic credit is given for the internship through enrollment in BUS 4840 and BUS 4841 (listed above). A student can enroll in these two courses during the fall, spring or summer semester.

### Minor in International Business

Youngstown State University students are invited to enhance their educational experience with a minor in International Business. International Business studies activities involve cross border transactions of goods, services and resources between two or more nations. A minor in International Business can be met through successful completion of the following requirements:
Minor in Business (for Non-Business Major)

Youngstown State University students are invited to enhance their educational experience with a minor in Business. The minor can be met through successful completion of the following requirements:

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<th>COURSE</th>
<th>TITLE</th>
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<tbody>
<tr>
<td>BUS 1500</td>
<td>Exploring Business</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 2602</td>
<td>Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>MGT 2604</td>
<td>Legal Environment of Business 1</td>
<td>3</td>
</tr>
<tr>
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</tr>
<tr>
<td>MGT 3725</td>
<td>Fundamentals of Management</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Semester Hours: 18

NOTE: Students interested in declaring a minor in Business need to complete an Intra University Transfer Request form with their academic advisor. Students pursuing a WCBA minor must meet all course prerequisites to enroll in a WCBA course, including a minimum overall GPA of 2.5 for upper division business courses. WCBA minor courses must be completed with the grade “C” or higher and cannot be taken credit/no credit.

The Entrepreneurship Center

THE ENTREPRENEURSHIP CENTER

Contact: Joe Angelo
jfangelo@ysu.edu

The Entrepreneurship Center supports students at YSU interested in entrepreneurship. Through the Entrepreneurship Center, students can participate in competitions, receive support to pursue their entrepreneurial dream, network with entrepreneurs, and participate in the professional student organization, Enactus. The WCBA offers a minor and certificate in Entrepreneurship, which are available to students in any major at YSU.

Center for Nonprofit Leadership

Contact: Laura Dewberry
ljdewberry@ysu.edu

The Center for Nonprofit Leadership, housed in the Williamson College of Business Administration, provides academic programming and professional development experiences for students interested in pursuing a career in the nonprofit sector and/or community leadership positions. The Center offers a certificate (p. 609) and minor (p. 609) in Nonprofit Leadership. Both can be combined with any major on campus. The nonprofit sector offers employment opportunities in a variety of professional disciplines as well as the opportunity to "make a living, making a difference.”

Also available through the Center for Nonprofit Leadership is the Student Nonprofit Leadership Organization (SNLO). SNLO is an organization for currently-enrolled students pursuing a baccalaureate degree. The organization provides professional nonprofit management experiences through site visits, community service projects, and consulting projects.

For more information, visit the Center for Nonprofit Leadership. (https://ysu.edu/academics/williamson-college-business-administration/centers/nonprofit-leadership/)

Center of Excellence in International Business

Contact: Dean Betty Jo Licata
bjlicata@ysu.edu

The Williamson College of Business Administration (WCBA) Center of Excellence in International Business integrates the strong and varied international business activities of the Williamson College of Business Administration, the Williamson Center for International Business (WCIB), the Ohio Small Business Development Center, and the International Trade Administration, the Williamson Center for International Business (WCIB), the Ohio Small Business Development Center, and the International Trade Network to accelerate the attainment of goals related to international business education, research in international business, and regional economic development.

The goals of the WCBA Center of Excellence in International Business (CEIB) are designed to advance our work in teaching, scholarship, and outreach services and bring increased impact through the integration of global business issues across the curriculum and in the business community.

For more information, visit the Center of Excellence in International Business (http://www.ysu.edu/academics/williamson-college-business-administration/centers/).
For over thirty years, the Ohio Small Business Development Center at YSU has accelerated business growth, helped to create jobs and contributed to the economy by providing consulting and training to existing companies and new start-ups. Through its Export Assistance Network, the Center also helps companies with initiating or expanding international trade and exporting opportunities to compete in the global marketplace.

The SBDC leverages its expertise and network of resources through student interns & graduate assistants working at the Center and student/faculty class projects in the Williamson College of Business Administration. The SBDC and EAN are among the premier economic development agencies in the area, and offer services that include:

- strategic business planning
- financial modeling & analysis
- cash flow forecasting
- strategic sales & market planning
- loan proposal development
- export and international trade consulting
- customized domestic & international trade market research
- business & exporting seminars

The SBDC is partially funded through the U.S. Small Business Administration and the Ohio Development Services Agency, and is part of a network of Centers throughout the country.

For more information, visit: The Ohio Small Business Development Center and Export Assistance Network at Youngstown State University.

The Procurement Technical Assistance Center (PTAC) at Youngstown State University

Contact:
Joseph Scott, Director, Procurement Technical Assistance Center, jmscott01@ysu.edu

The Ohio Procurement Technical Assistance Center (PTAC) at Youngstown State University supports the economic growth of existing businesses entering the local, state, and federal government contracting markets, by providing consulting services and training programs. The PTAC prides itself on connecting companies in Trumbull, Mahoning and Columbiana counties with significant business opportunities in government procurement.

The PTAC leverages its expertise and network of resources through student interns & graduate assistants working at the Center, and student/faculty class projects in the Williamson College of Business Administration. The PTAC is among the premier economic development agencies in the area, located in collaboration with the Ohio Small Business Development Center (SBDC) and Export Assistance Network (EAN) (https://catalog.ysu.edu/undergraduate/colleges-programs/college-business-administration/ohio-small-business-development-center-ysu/) at Youngstown State University. PTAC services include:

- Determining Your Company's Suitability for Government Contracting
- Securing Necessary Entity Registrations & Certification Eligibility
- Developing Capability Statements
- Identifying Bid Opportunities
- Troubleshooting Contract Performance Issues
- Providing SBIR/STTR Assistance

The PTAC is partially funded through a cooperative agreement with the U.S. Defense Logistics Agency, the Ohio Development Services Agency and
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