

YOUNGSTOWN STATE UNIVERSITY

GRADUATE CATALOG 2024-2025

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YOUNGSTOWN STATE UNIVERSITY 1967

YOUNGSTOWN UNIVERSITY

YOUNGSTOWN COLLEGE

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College of Graduate Studies Coffelt Hall

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General Information

Graduate Programs

The following graduate degree programs are offered by Youngstown State University:

Doctoral Degree Programs

- Doctor of Education in Educational Leadership
- Doctor of Nursing Practice Nurse Anesthesia Option
- Doctor of Philosophy in Health Sciences
- · Doctor of Philosophy in Materials Science and Engineering
- Doctor of Physical Therapy

Educational Specialist Degree

Educational Specialist in School Psychology

Master's Degree Programs

- Master of Arts in American Studies
- Master of Arts in English
- Master of Arts in Gerontology
- Master of Arts in History
- · Master of Arts in Professional Communication
- · Master of Athletic Training
- Master of Business Administration
- · Master of Computing and Information Systems
- · Master of Education in Intervention Services
- Master of Fine Arts in Creative Writing
- Master of Health and Human Services
- Master of Music in Music Composition
- Master of Music in Performance
- Master of Public Health
- Master of Respiratory Care
- · Master of Science in Applied Behavior Analysis
- · Master of Science in Biological Sciences

- Master of Science in Chemistry
- Master of Science in Criminal Justice
- Master of Science in Data Science and Statistics
- Master of Science in Environmental Science
- Master of Science in Health Sciences
- · Master of Science in Mathematics
- Master of Science in Education Counseling
- Master of Science in Education Educational Administration
- Master of Science in Education Special Education
- Master of Science in Education Curriculum and Instruction
- Master of Science in Chemical Engineering
- Master of Science in Civil and Environmental Engineering
- Master of Science in Electrical and Computer Engineering
- Master of Science in Engineering Management
- · Master of Science in Industrial and Systems Engineering
- · Master of Science in Mechanical Engineering
- Master of Science in Nursing Adult-Gerontology Acute Care Nurse Practitioner
- · Master of Science in Nursing Family Nurse Practitioner
- Master of Science in Nursing Nursing Education
- Master of Social Work

Online Graduate Programs

- Doctor of Education in Educational Leadership
- Master of Arts in Gerontology
- Master of Business Administration
- · Master of Health and Human Services
- Master of Music in Music Education
- · Master of Respiratory Care
- Master of Science in Applied Economics
- Master of Science in Criminal Justice
- Master of Science in Mathematics
- Master of Science in Engineering, Management option
- Master of Science in Education Educational Administration
- · Master of Science in Education Special Education
- Master of Science in Education Curriculum and Instruction
- · Post-master's Adult-Gerontology Acute Care Nurse Practitioner Certificate
- Post-master's Family Nurse Practitioner Certificate Program
- Post-master's Nursing Education Certificate
- Certificate in Data Analytics
- · Certificate in Principal Licensure
- · Certificate in Superintendent Licensure
- · Certificate in Teacher Leadership Endorsement

Certificates

- · Certificate in Aging Studies
- Certificate in Applied Geospatial Science and Technology
- · Certificate in Applied History
- Certificate in Computer Science Endorsement
- · Certificate in Data Analytics
- Certificate in Economics
- Certificate in English
- · Certificate in Environmental Studies
- · Certificate in Health Care Management
- · Certificate in Health Informatics
- · Certificate in Homeland Security

- · Certificate in Literature for Children and Young Adults
- · Certificate in Mathematics
- · Certificate in Principal Licensure
- · Certificate in Superintendent Licensure
- · Certificate in Public Health
- · Certificate in Public Health Administration
- · Certificate in Public Health Research
- · Certificate in Professional and Technical Writing
- Certificate in Teaching English to Speakers of Other Languages (TESOL)
- Certificate in Teacher Leadership Endorsement
- Certificate in the Teaching of Literature
- Certificate in Teaching of Writing
- · Certificate in Working Class Studies
- · Post-master's Administrative Specialist Certificate
- · Post-master's Adult-Gerontology Acute Care Nurse Practitioner Certificate
- · Post-master's Certificate in Counseling Practice
- Post-master's Family Nurse Practitioner Certificate Program
- Post-master's Certificate in Higher Education Leadership and Administration
- Post-master's Nursing Education Certificate

Doctor of Education in Educational Leadership

Program Coordinator

Dr. Jane Beese

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Program Description

The Doctor of Education program in Educational Leadership at YSU offers comprehensive professional preparation for administrators in both public and nonpublic schools, health and human service organizations, and various leadership roles across different settings. Admission may also be considered for professionals currently in leadership positions outside the traditional educational field, subject to cohort availability.

This program is inclusive and welcomes health professionals seeking a rigorous curriculum in research and leadership studies when no terminal degree exists in their specific field. The primary goal is to equip individuals with the skills and knowledge required for effective leadership, emphasizing efficiency, equity, and excellence in their respective organizations.

Our program places a strong emphasis on developing professionally committed practitioners who embody current knowledge and best practices in educational leadership. Key competencies covered include scholarship, instruction, leadership, management, external relations, and personal growth. All of this is conveniently delivered in a fully online format, making it accessible to a wide range of students.

Additionally, we offer a specialized track within the program that focuses on Higher Education, catering to those aspiring to leadership roles in colleges and universities.

To ensure students make continuous progress, they are expected to maintain active enrollment within their cohorts. Students who temporarily discontinue their studies will need to wait for the regular core course rotation to access missed courses. For those who have been inactive for more than three terms, readmission will be contingent on the recommendation of the Graduate School. The Doctor of Education program is overseen by the Department of Teacher Education and Leadership Studies within the Beeghly College of Liberal Arts, Social Sciences, and Education at YSU.

Accreditation

The Ed.D. program in educational leadership is nationally recognized by the National Policy Board for Educational Leaders along with the Educational Leadership Constituent Council. Education programs at Youngstown State University are accredited by the Council for the Accreditation of Educator Preparation.

Application Procedure

Program information may be obtained from the Department of Teacher Education and Leadership Studies. Application and financial aid information may be obtained from Graduate Admissions in Coffelt Hall. All application materials must be sent to Graduate Admissions. Please confirm all deadlines with Graduate Admissions. Because application deadlines and the professional mix in cohorts may vary from year to year, those interested in the program are encouraged to contact the department in advance of initiating the application process.

Residency

Concentrated effort, continuing peer and faculty interaction, and scholarly reflection relatively free from distraction are needed if the student is to develop a considered and mature vision of the profession. Each student is required to meet a minimum residency requirement of enrollment for 18 semester hours during the period of three consecutive semesters, including summer session(s). Residency may be accomplished by means of online enrollment. Dissertation credits may not be used to satisfy the residency requirement.

Special Notes

Departmental policies and procedures governing the operation of the Ed.D. program are set out in the program *Administrative Handbook* and *Student Handbook*.

All students who successfully complete a doctoral comprehensive examination will be required to enroll in every semester of their candidacy until graduation.

Graduate Studies policies concerning transfer credits, time limits, and other academic matters must be followed. See the General Information of the *Graduate Catalog, the College of Graduate Studies Academic Policy Book,* and graduate faculty minutes for current information.

With appropriate selection of concentration courses, this program may provide licensure in either principalship or superintendency or both in Ohio and/or Pennsylvania for educators that satisfy other requirements established by the university and the respective state departments of education.

Admission Requirements

Acceptance into the Ed.D. program reflects superior qualifications. Admission is based upon a competitive evaluation of applications against criteria established by the doctoral program faculty. Diversity among students in terms of race, gender, disability, geography, and professional discipline is desirable. In addition to the admission requirements of the College of Graduate Studies, applicants will be evaluated holistically for their likely success in the program based on the following weighted criteria:

Professional Qualifications and Experience

Submission of a detailed resume including:

- Professional Employment History indicating substantial administrative, managerial, or leadership experience.
- · Education and Professional Licenses, Certificates, and Endorsements

- · Leadership Experience, Accomplishments, Awards, Formal and Informal Leadership
- · Community Service including Leadership, Collaboration, and Participation in Civic Projects
- · Professional Publications and Presentations
- · Professional Associations

High Academic Achievement

- · A 3.25 GPA in an accredited master's degree program in educational administration, health and human services, or closely allied field.
- · If graduate GPA is below 3.25, the Graduate Record Exam is required with a combined score of 290 on the general tests completed within the last five vears.

Candidates are required to take a writing exam.

Degree Requirements

The credit hours required for the Ed.D. in educational leadership consists of a minimum of 60 semester hours beyond the master's degree. These include:

- 24 semester hours of doctoral educational leadership core courses,
- · 9 semester hours of doctoral educational research core courses,
- · 12 semester hours of specialization
- · 3 semester hours of clinical
- · 12 hours of dissertation studies.

A minimum of 45 semester hours of graduate credit beyond the master's degree, exclusive of dissertation credits, must be earned at YSU. Students can transfer up to 15 semester hours of post-master's work that satisfy program elective requirements into the doctoral program from other institutions. Transfer credits may be accepted upon recommendation of the Ed.D. program and approval of the Graduate College within the policies of the College of Graduate Studies.

See the Courses section of this catalog for required prerequisite study for each course. Certain courses reflect the particular vision of the YSU program and are to be completed at YSU. This information is noted in parentheses.

COURSE	TITLE	S.H.
Educational Lea	dership Core	
EDAD 8122	Leadership in Education	3
EDAD 8125	Educational Politics and Policymaking in the United States	3
EDAD 8130	Learning Processes and the Instructional Leader	3
EDAD 8135	Building Organizational Culture and Community Partnerships	3
EDAD 8142	Educational Problem Solving and Ethical Decision Making	3
EDAD 8140	Seminar in Administrative Theory	3
EDAD 8155	Seminar in Current Educational Issues	3
FOUN 8102	Perspectives on Leadership Among Diverse Populations	3
Total Semester	Hours	24

Total Semester Hours

There are two research tracks available in the Doctoral Program in Educational Leadership. These tracks have been designed to cater to different career goals and interests, ensuring that you receive the most relevant and comprehensive education in the field of research.

Track 1: Researcher Focus For those of you who are passionate about becoming experts in research methods and data analysis, the Researcher track is the perfect fit. This track follows a traditional route and includes courses in research methods, advanced statistics, and theoretical frameworks. You will gain exposure to various research designs, such as quantitative,

qualitative, and mixed methods, and develop proficiency in advanced statistical techniques. The curriculum will cover survey design, sampling methods, and experimental design, preparing you for academic careers or research positions in universities, government agencies, and research organizations.

COURSE	TITLE	S.H.
Track 1: Research	er Focus	
FOUN 8104	Research Strategies in Educational Administration	3
FOUN 8111	Advanced Research Design and Statistics	3
FOUN 8112	Qualitative Research for Educators	3
Total Semester Hours		9

Track 2: Practitioner Focus If your career aspirations lie in the realm of educational and health and human service leadership roles and making a direct impact on practice, the Practitioner track is designed to equip you with the necessary skills. This track recognizes the importance of research skills in decision-making processes and outcomes within organizations and institutions. You will focus on understanding research design, data collection, and analysis within your specific field of interest. This track emphasizes the use of qualitative research methods, like focus groups and interviews, to gain valuable insights from stakeholders. Additionally, you will learn how to utilize quantitative research methods, using school data to inform decision making. The ultimate goal is to bridge the gap between research and practice, empowering you to make evidence-based decisions that lead to positive change.

COURSE	TITLE	S.H.
Track 2: Practiti	oner Focus	
EDAD 8105	Research Methods for the Practitioner	3
EDAD 8114	Applied Case Study Methodology	3
EDAD 8180C	ST Prog Eval and Data Mining	3
Total Semester	Hours	9

Total Semester Hours

Areas of Specialization

A variety of areas of specialization are offered to fulfill your elective requirements. These options encompass General Leadership, Principal or Superintendent Licensure, Higher Education Leadership and Administration, or Health & Human Services.

*Note, you must hold a principal license in order to pursue the superintendent license

General Leadership

Choose a minimum of 6 semester hours (s.h.) from courses focused on leadership in both public and non-public schools, and another 6 s.h. from courses related to teaching, learning, data utilization in schools, or research. This comprises a total of 12 s.h. in elective requirements.

COURSE	TITLE	S.H.
General Leadership)	
Select 6 s.h. of tea	ching and learning electives	6
TCED 6932	Action Research in Urban and Rural Education	
TCED 6933	Brain Based Teaching and Learning	
TCED 6905	Introduction to Digital Teaching and Learning	
TCED 6936	Curriculum, Assessment, and Instruction to Improve Learning	
TCED 6906	Designing Curriculum for the 21st Century Learner	
TCED 6907	Literacy for Digital Teaching and Learning	
TCED 6908	Digital Learning Environments	
TCED 6911	Coding for Educators	

TCED 6912	Gaming for Educators	
TCED 6940	Foundations of STEM Education Theory to Practice	
TCED 6942	Environmental Inquiry	
TCED 6943	STEM Integration in the P-12 Classroom	
TCED 6944	A Global Perspective	
EDAD 6901	Instructional Leadership Beyond the Classroom	
EDAD 6905	Culturally Responsive Teaching and Learning	
EDAD 6906	Data-Coaching and Decision Making	
Select 6 s.h. of edu	cational leadership and research electives	6
EDAD 6915	Learning, Teaching, and Instructional Leadership	
EDAD 6933	Educational Leadership and Organizational Change	
EDAD 6936	Culturally Responsive Leadership	
EDAD 7020	Human Resource Leadership	
EDAD 6947	School Building Operations and Management	
EDAD 6948	Data Driven School Improvement and Program Evaluation	
EDAD 6954	Community Engagement and Collaborative Partnerships	
EDAD 7018	School Discipline and Student Support Services: Policies, Programs and Prevention Strategies	
EDAD 6949	Legal and Ethical Issues in Public Administration	
EDAD 6952	School Finance and Budget Planning Processes	
EDAD 7024	Collective Bargaining and Systems Issues in Human Resources Administration	
EDAD 7025	Educational Governance: Advanced Law and Policy Seminar	
EDAD 7026	Technology and Facilities for Learning Organizations	
EDAD 7035	The Superintendency and Evolving Ways of Looking at Leadership	
EDAD 7012	Technology Leadership and Organizational Change	
EDAD 8131	Social Emotional Wellness for Wounded Students from a Leadership Perspective	
Total Semester Ho	urs	12

Superintendent Licensure

Superintendent licensure encompasses four 3 s.h. courses, summing up to 12 s.h. This component fulfills the elective requirement within the doctoral program. Additionally, candidates are required to successfully finish EDAD 7050 Clinical Practice, which satisfies the doctoral clinical course requirement.

COURSE	TITLE	S.H.
Superintendent Li	censure	
EDAD 7035	The Superintendency and Evolving Ways of Looking at Leadership	t 3
EDAD 7024	Collective Bargaining and Systems Issues in Human Resources Administration	3

Total Semester Hou	Irs	12
requirement		
*plus EDAD 7050 Cl	inical Practice that satisfies a doctoral clinical course	
EDAD 7026	Technology and Facilities for Learning Organizations	3
	Educational Governance: Advanced Law and Policy Seminar	3

Higher Education Leadership and Administration

COURSE	TITLE	S.H.
Higher Education		
EDAD 8141	History of Higher Education	3
EDAD 8147	Diversity & Equity in Higher Education	3
EDAD 8143	Higher Education Finance & Policy	3
EDAD 8144	Assessment and Evaluation in Higher Education	3
Total Semester Ho	urs	12

Additionally, EDAD 7070 Clinical Experience in Higher Education is required to fulfill the clinical requirement.

Higher Education students are required to take EDAD 8126 Legal Course in Higher Education instead of EDAD 8125 Educational Politics and Policy making in the United States.

Health and Human Services

Total Semester Hours	S	12
*plus EDAD 7040 Clir requirement	nical Practice that satisfies a doctoral clinical course	
Select 12 s.h. of educ courses	cational leadership and HHS concentration area	12
Health and Human S	ervices	
COURSE T	ITLE	S.H.

Additionally, EDAD 7060 Clinical Experience in Health and Human Services is required to fulfill the clinical requirement.

HHS students are required to take EDAD 8125 Educational Politics and Policy making in the United States

Principal License

This specialization entails additional semester hours, which will elevate your total program hours from 60 s.h. to 63 s.h. The Principal License component comprises four 3 s.h. courses, one 2 s.h. course, and 4 s.h. dedicated to clinical practice, resulting in a total of 18 s.h. This allocation fulfills the elective requirement within the doctoral program. To meet this requirement, candidates must successfully complete 4 s.h. of EDAD 7022 Clinical Practice, thereby satisfying the doctoral clinical course requirement.

COURSE	TITLE	S.H.
Principal License		
EDAD 6915	Learning, Teaching, and Instructional Leadership	3
EDAD 6936	Culturally Responsive Leadership	
EDAD 6952	School Finance and Budget Planning Processes	3
EDAD 7019	Special Education Law and Policy	
EDAD 7022A	Clinical Experience: The Principalship-Elementary (E) Middle (M) Secondary (S)	1-4
EDAD 7022B	Clinical Experience: The Principalship-Elementary (E) Middle (M) Secondary (S)	1-4
Total Semester Ho	urs	13-19

Clinical Practice in Educational Leadership

COURSE	TITLE	S.H.
Select from follow	ing for 3 s.h. total	
EDAD 7022A	Clinical Experience: The Principalship-Elementary (E) Middle (M) Secondary (S)	
EDAD 7022B	Clinical Experience: The Principalship-Elementary (E) Middle (M) Secondary (S)	
EDAD 7040	Clinical Practice for the Administrative Specialist	
EDAD 7050A	Clinical Experience: Superintendency	
EDAD 7050B	Clinical Experience: Superintendency	
EDAD 7060A	Clinical Experience: Health and Human Services	
EDAD 7060B	Clinical Experience: Health and Human Services	
EDAD 7070A	Clinical Experience in Higher Education	
EDAD 7070B	Clinical Experience in Higher Education	

Total Semester Hours

Dissertation study

COURSE	TITLE	S.H.	
EDAD 8191	Seminar in Educational Research–Dissertation: Review of Literature	2	
EDAD 8192	Seminar in Educational Research: Introduction & Proposal Defense	2	
EDAD 8193	Seminar in Educational Research–Dissertation: Methodology	2	
EDAD 8194	Seminar in Educational Research – Dissertation: Data Collection & Analysis	2	
EDAD 8195	Seminar in Educational Research: Dissertation: Results & Discussion	2	
EDAD 8196	Seminar in Educational Research: Dissertation Defense	2	
Four one s.h. sessions of EDAD 7022 are required for Principal Licensure.			

Four one s.h. sessions of EDAD 7022 are required for Principal Licensure. The principal clinical requirement satisfies the clinical requirement for the Doctoral program

Total Semester Hours

Candidates must purchase a TaskStream account at the beginning of their studies, which is necessary for our accreditation through The Council for the Accreditation of Educator Preparation (CAEP).

12

Comprehensive Examinations

All candidates are required to complete and pass the Comprehensive Examination at the conclusion of courses aligned with program standards. These Comprehensive Examinations encompass a series of nine exams, including seven aligned with the NELP standards and two focused on research and technology, Exams are spread throughout the program and taken with the courses aligned with the NELP standards, ISTE leadership standards, and data & research literacy. These exams are designed to evaluate the candidate's mastery of the NELP standards integral to effective leadership within the professional knowledge domain. Successful achievement in these examinations serves as a prerequisite for the student to be considered as a candidate for the Ed.D. degree.

Maximum C Grade Policy

A student may count no more than 9 s.h. of coursework with a grade of C may count toward the minimum graduation hour requirement.

Graduate Faculty

Jane Beese, Ed.D., Professor Organizational leadership; economics of education; program evaluation

Charles Jeffords, Ed.D., Assistant Professor Administrative practices; school and community relations; school finance

Karen H. Larwin, Ph.D., Professor Assessment; research design and methodology; statistics

Nathan Myers, Ph.D., Associate Professor

Learning Outcomes

3

In the Doctoral Program candidate performance is assessed across the following objectives with focus at the district level.

- Mission, Vision, and Improvement: Candidates will be able to "collaboratively lead, design and implement a district mission, vision and process for continuous improvement that reflects a core set of values and priorities" (NELP, 2018, pg. 13).
- 2. Ethics and Professional Norms: Candidates will be able to "promote the current and future success and well-being of each student and

adult by applying ethical decisions and cultivate and enact professional norms" (NELP, 2018, pg. 15).

- 3. Equity, Inclusiveness, and Cultural Responsiveness: Candidates will be able to "develop and maintain a supportive, equitable, culturally responsive and inclusive district culture" (NELP, 2018, pg. 18).
- Learning and Instruction: Candidates will be able to "evaluate, develop, and implement coherent systems of curriculum, instruction, supports and assessment" (NELP, 2018, pg. 21).
- Community and External Leadership: Candidates will be able to "engage families, community, and other constituents in the work of schools and the district and to advocate for district, student and community needs" (NELP, 2018, pg. 25).
- Operations and Management: Candidates will be able to "develop, monitor, evaluate and manage data-informed and equitable district systems for operations, resources, and human capital management" (NELP, 2018, pg. 28).
- Policy, Governance, and Advocacy: Candidates will be able to "cultivate relationships, lead collaborative decision making and governance, and represent and advocate for district needs in broader policy conversations" (NELP, 2018, pg. 31).
- 8. **Internship:** Candidates will be able to synthesize and apply the above outcomes through substantial, sustained, standards-based work in real district settings.

Reference

National Educational Leadership Preparation (NELP) Program. (2018). National educational leadership preparation (NELP) program recognition standards— District level. Retrieved from www.npbea.org (http://www.npbea.org)

Graduate Courses

EDAD 6901 Instructional Leadership Beyond the Classroom 3 s.h. Teacher leaders will lead both from within their own classrooms and beyond, therefore it will be important to equip candidates with the knowledge and skills that will assist them in any leadership situation they may face. Candidates will be introduced to the theory and practice of teacher leadership in order to assist in building teacher commitment, teacher efficacy, teaching competence, and instructional practices. There will be an additional emphasis on developing teacher leaders, specifically in the areas of adult learning principles, reflective practice, and professional learning communities. Candidates will be introduced to the importance of self-directed teacher professional development, taking on leadership roles at school, district, state, and national levels, as well as learning how to lead in both formal and informal ways.

EDAD 6903 Building Capacity of Adult Learners 3 s.h.

Learning is an extended, intricate, and lifelong process. Adult learners have a unique way of learning, one that varies from learning done in primary grades. As such, teacher leaders will need to have strong command of adult learning principles to effectively collaborate with others and assist adults in their own professional development. A study of current theories and research in the areas of social cognition, human development, interpersonal relationships, group processes, and motivation will assist candidates in meeting the needs of the adults they will work with. This course will be particularly helpful to those who mentor, lead professional development sessions, serve on building or district leadership teams, and participate in professional learning communities.

EDAD 6905 Culturally Responsive Teaching and Learning 3 s.h.

Educational leaders must practice professional, ethical values of equity, integrity, honesty, fairness, and dignity. The purpose of this course is to build candidate knowledge and skills in the area of culturally responsive leadership. Candidates will develop the ability to promote collaboration with faculty, administration, families, and community members and partners. This course will help candidates lead in culturally competent ways in order to make necessary changes in curriculum, culture, and school policies and practices. Additionally, candidates will learn how to assist others in providing individual learning opportunities for students where diverse perspectives are welcomed in addressing challenges.

EDAD 6906 Data-Coaching and Decision Making 3 s.h.

The purpose of this course is to provide candidates with the knowledge and skills to understand and utilize data to identify school improvement needs and make informed decisions in making change. Specifically, the course will provide opportunity for candidates to learn the nature of multiple data sources to identify patterns, trends, and improvement needs, conduct descriptive analysis, monitor and correct progress, and assist in developing high quality assessments. Candidates will experience authentic data-driven decision making by accessing state, district, school, and a variety of other relevant data resources to conduct descriptive and inferential analysis of trends and needs.

EDAD 6915 Learning, Teaching, and Instructional Leadership 3 s.h. Leadership behaviors and expectations intended to build teacher commitment, increase teaching competence, and improve the learning climate of students. The importance of and role that adult development and learning play in teacher leadership regarding curriculum and instruction decisions are stressed.

EDAD 6933 Educational Leadership and Organizational Change 3 s.h. This course reviews, examines, and critiques significant theories, research, and professional practice related to school leadership. This course reviews the main research, theories, and practices that have been proven to facilitate effective organizational leadership. Change theory and processes will be studied to acquire knowledge and skills that will aid the development, implementation, and evaluation of a continuous, responsive, sustainable, data-based school improvement process. This course examines the concept of educational change, the role of school leaders as agents of change, and alternative change models and strategies, including the importance in attaining outcomes intended when introducing new initiatives.

EDAD 6936 Culturally Responsive Leadership 3 s.h.

This course examines culturally responsive pedagogy (CRP), which is a philosophy to facilitate student engagement and academic success by incorporating student cultures, experiences, and identities into the curriculum so that students and teachers can become co-creators of classroom knowledge.

EDAD 6947 School Building Operations and Management 3 s.h. Theories of leadership and schooling that provide future principals with quides for action and behavior will be presented. Theories that shape personal

decision-making processes that build schools as learning communities will be presented.

EDAD 6948 Data Driven School Improvement and Program Evaluation 3 s.h. This course examines the integral impact data-informed decision management has on educational accountability and the efficacy of program initiatives that facilitate standards for improvement in the classroom, building, and district level. Comprehensive data retrieval, analysis, and interpretation are invaluable to promote equitable and culturally responsive leaders who foster not only school improvement, but also a climate where accountability for students reaches further than academic performance.

EDAD 6949 Legal and Ethical Issues in Public Administration 3 s.h. Reviews the legal foundation of schools and educational policy through the review of cases, statues, and constitutional provisions affecting the operation of elementary and secondary schools in the United States and explores the relationship between legal, ethical, and political issues in public administration. Acquaints educators with professional norms and ethical as well as legal standards, and means of identifying, evaluating, and making legal and ethical decisions, and modeling such behavior communicating and cultivating legal and ethical behavior in others.

EDAD 6952 School Finance and Budget Planning Processes 3 s.h.

This course focuses on an analysis of school funding on a state and local level. School budgeting, site-based management, and school business practices are major topics. An action research project is part of the course requirement.

EDAD 6954 Community Engagement and Collaborative Partnerships 3 s.h.

Within this course, candidates will explore, study, examine, and practice skills, which illustrate the role strategic marketing can play in building community support for schools and their programs. Within this context, candidates enrolled in this course will develop leadership perspectives that support school community collaboration and partnerships.

EDAD 6975 Introduction to Administration Clinical Experience 3 s.h.

Designed to expand candidate's knowledge of the nature, characteristics and demands associated with school administration and provide opportunity to develop skills and dispositions needed for administrative responsibilities. Includes focused field experiences embedded in various courses throughout the program. Requires candidates to perform a particular administrative function in school and community settings.

Prereq.: Completion of five of the following courses EDAD 6915, EDAD 6931, EDAD 6933, EDAD 6947, EDAD 6949, EDAD 6954, and EDAD 6955.

EDAD 6993 Special Topics in Educational Administration 1-4 s.h.

Prereq.: Admission to master's degree program in educational administration.

EDAD 7012 Technology Leadership and Organizational Change 3 s.h.

The role of a leader is to construct a vision for the appropriate use of technology and provide needed supports and resources for all stakeholders to meet it. The new pedagogy for digital natives must shift from the teacher teaching how to operate specific technology or applications to using technology to facilitate a deeper understanding and knowledge. The pedagogical shift to leveraging technology as a tool for learning facilitation, requires a leader who is willing to support his/her stakeholders throughout the change process. Effective technology initiatives are not device centric, but people centric, as they are the ones who create the environment for learning. This course explores how a culture of change will replace traditional technology use and pedagogy with technology integrated throughout the culture and aligned to standards and essential conditions as defined by the International Society for Technology in Education.

EDAD 7018 School Discipline and Student Support Services: Policies, Programs and Prevention Strategies 3 s.h.

Examines school discipline and youth problems that threaten student health, welfare, and safety and research-proven school programs for addressing such problems. Emphasizes the role of school leaders in developing and implementing comprehensive policies and student support programs.

EDAD 7019 Special Education Law and Policy 2 s.h.

Provides an introduction to schools as political systems and the values that shape educational politics and policymaking. Examines the concept of educational change, the role of school leaders including the importance of implementation in attaining outcomes intended when introducing new initiatives. Uses special education law as vehicle for exploring change in educational policy and practice. Reviews the rights of pre and elementary and secondary students with disabilities to a free and appropriate education through an examination of state and federal laws, regulations, guidance documents and judicial interpretations of the Individual with Disabilities Act and Section 504 of the Rehabilitation Act of 1973. Explores issues of eligibility and evaluation; IEP development and student placement in LRE settings; related, assistive technology, and transition services; student discipline and behavior management; means of conflict or dispute resolution including mediation and due process hearings; as well as remedies available to parents for non-compliance under IDEIA.

Prereq.: Admission to the Master's in Educational Administration Program.

EDAD 7020 Human Resource Leadership 3 s.h.

This course provides an in-depth examination of policies and practices designed to reconcile the interests of organizations (schools) and stakeholders (staff, faculty, and community). Topics include professional and staff development, equal employment, positions description, recruitment, selection, performance appraisal, removal, compensation, and emerging human resource issues.

EDAD 7022A Clinical Experience: The Principalship-Elementary (E) Middle (M) Secondary (S) 1-4 s.h.

Completed in a school covered by teaching certificate or license. Second administrative clinical experience designed to highlight tasks. May be repeated for credit to fulfill program requirements.

EDAD 7022B Clinical Experience: The Principalship-Elementary (E) Middle (M) Secondary (S) 1-4 s.h.

Completed in a school covered by teaching certificate or license. Second administrative clinical experience designed to highlight tasks. May be repeated for credit to fulfill program requirements.

EDAD 7024 Collective Bargaining and Systems Issues in Human Resources Administration 3 s.h.

Human resources issues from the central office perspective. Statutory, regulatory, and political contexts for public sector collective bargaining. Conceptual and experiential treatment of traditional and interest-based bargaining. Approaches to human resources policy development. Grievances and management of written agreements.

EDAD 7025 Educational Governance: Advanced Law and Policy Seminar 3 s.h.

Explores emergent legal developments affecting P-12 education systems and the role and limits of the law in promoting educational emergent reform. Reviews social science literature on governance issues and factors that affect the nature, degree, and rate of organizational compliance.

EDAD 7026 Technology and Facilities for Learning Organizations 3 s.h.

Due to increasing demands upon the educational facilities by the instructional use of technology and the need to prepare students for the world of work, facility management and integration of technology into the facility are examined.

EDAD 7035 The Superintendency and Evolving Ways of Looking at Leadership 3 s.h.

This course examines the role of superintendent in the administration of schools. Students will study leadership in complex social organizations so that they can apply current theory and research to their roles in complex, chaotic, educational environments.

EDAD 7040 Clinical Practice for the Administrative Specialist 3 s.h.

Candidates for administrative specialist licenses in areas of curriculum, instruction, and professional development or pupil services administration develop an individualized clinical plan and complete a set of tasks and an integrated project aligned with professional standards under the guidance of an appropriately licensed cooperating administrator.

EDAD 7050 Clinical Experience: Superintendency 1 s.h.

Candidates for the superintendency license are required to complete four tasks from the master syllabus at the district-wide level, supervised by a school superintendent. Major components are the complete analysis of the financial structure of the candidate's school district and a system-level integrated project.

EDAD 7050A Clinical Experience: Superintendency 1 s.h.

Candidates for the superintendency license are required to complete four tasks from the master syllabus at the district-wide level, supervised by a school superintendent. Major components are the complete analysis of the financial structure of the candidate's school district and a system-level integrated project.

Prereq.: Completion two years experience in a building-level administrative capacity or equivalent.

EDAD 7050B Clinical Experience: Superintendency 1 s.h.

Candidates for the superintendency license are required to complete four tasks from the master syllabus at the district-wide level, supervised by a school superintendent. Major components are the complete analysis of the financial structure of the candidate's school district and a system-level integrated project.

Prereq.: Completion of two years experience in a building-level administrative capacity or equivalent.

EDAD 7060A Clinical Experience: Health and Human Services 1 s.h. The clinical practice for Health and Human Service Leaders is an intensive, 21-week, field-based experience that expands the candidate's awareness of the nature, characteristics and demands associated with senior leadership roles in HHS organizations. It provides an opportunity to apply administrative theories, concepts, and best practices under the mentorship of a veteran onsite administrator and a university supervisor. The experience, broken down into three 7-week terms, involves the completion of a series of administrative and leadership competencies spanning different areas of organizational operations aligned with the National Education Leadership Preparation (NELP) Standards. To satisfy the Ed.D. Clinical requirement, HHS candidates must enroll in EDAD 7060 for three 7-week terms. EDAD 7060 is denoted with an A or B depending on whether it appears in the 1st seven weeks or the 2d sevenweeks of the Fall, Spring or Summer Semester.

Prereq.: EDAD 8122, EDAD 8125, EDAD 8130, EDAD 8135, EDAD 8142, EDAD 8140, EDAD 8155, EDAD 8102.

EDAD 7060B Clinical Experience: Health and Human Services 1 s.h.

The clinical practice for Health and Human Service Leaders is an intensive, 21-week, field-based experience that expands the candidate's awareness of the nature, characteristics and demands associated with senior leadership roles in HHS organizations. It provides an opportunity to apply administrative theories, concepts, and best practices under the mentorship of a veteran onsite administrator and a university supervisor. The experience, broken down into three 7-week terms, involves the completion of a series of administrative and leadership competencies spanning different areas of organizational operations aligned with the National Education Leadership Preparation (NELP) Standards. To satisfy the Ed.D. Clinical requirement, HHS candidates must enroll in EDAD 7060 for three 7-week terms. EDAD 7060 is denoted with an A or B depending on whether it appears in the 1st seven weeks or the 2d seven-weeks of the Fall, Spring or Summer Semester.

Prereq.: EDAD 8122, EDAD 8125, EDAD 8130, EDAD 8135, EDAD 8142, EDAD 8140, EDAD 8155, EDAD 8102.

EDAD 7070A Clinical Experience in Higher Education 1 s.h.

Higher Education Internship is an intensive, 120 hour supervised internship designed to expand students' professional skills, awareness, reflective abilities, and capacity for leadership. The internship is completed under the mentorship of an accomplished on-site administrator in conjunction with a university supervisor. The internship involves the completion of a Higher Education Change Project keyed to a series of competencies aligned with the Professional Competency Areas for Student Affairs Educators as adopted by both NASPA (Student Affairs Administrators in Higher Education) and ACPA (College Student Educators International). Candidates participate actively in a Virtual Clinical Learning Community and share their clinical experiences with other administrative candidates at geographically-dispersed and demographically-diverse institutions. Finally, they develop a Comprehensive Competency Report that they can elect to fashion into Administrative and leadership lessons learned.

EDAD 7070B Clinical Experience in Higher Education 1 s.h.

Higher Education Internship is an intensive, 120 hour, over three 7-week sessions, supervised internship designed to expand students' professional skills, awareness, reflective abilities, and capacity for leadership. The internship is completed under the mentorship of an accomplished on-site administrator in conjunction with a university supervisor. The internship involves the completion of a Higher Education Change Project keyed to a series of competencies aligned with the Professional Competency Areas for Student Affairs Educators as adopted by both NASPA (Student Affairs Administrators in Higher Education) and ACPA (College Student Educators International). Candidates participate actively in a Virtual Clinical Learning Community and share their clinical experiences with other administrative candidates at geographically-dispersed and demographically-diverse institutions. Finally, they develop a Comprehensive Competency Report that they can elect to fashion into Administrative Portfolios documenting her or his clinical activities and the administrative and leadership lessons learned.

EDAD 8105 Research Methods for the Practitioner 3 s.h.

Research Methods for the Practitioner is an essential course designed for educators, administrators, and research practitioners seeking to enhance their research competency. The course is focused on providing practitioners with knowledge, skills, and resources to apply research-based practices in educational contexts. This course will enable students to think critically about research processes, develop a better understanding of scholarly research literature, and enhance their research literacy. By taking this course, students will gain insights into how research is conducted, evaluated, and used to inform decision making within their field. The course emphasizes practical application and hands-on experience, enabling students to develop a research plan, conduct data collection, and analyze and interpret research findings. As such, this course is an essential resource for practitioners seeking to improve their research skills and contribute to evidence-based practices within their educational contexts.

EDAD 8111 Advanced Research Design and Statistics 3 s.h.

An in-depth treatment of the major correlational, experimental, and quasiexperimental research designs and associated statistical analyses, including the design and analysis of surveys and factor analytic techniques. Experience in data analysis using SPSS or other statistical packages. 3 s.h. Cross listed with FOUN 8111.

Prereq.: EDAD/FOUN 8104.

EDAD 8114 Applied Case Study Methodology 3 s.h.

A course designed to acquaint students with qualitative inquiry. Focuses on philosophical and historical roots of investigation in institutional and social settings, with an emphasis on qualitative research methodology, techniques of exploring data, guided practice, ethical and social issues.

EDAD 8115 Evidence, Research and Program Evaluation 3 s.h.

Evidence, Research, and Data in Program Evaluation is designed for practitioners seeking to enhance their understanding of Program Evaluation and Data Mining methods. Students will explore quantitative research design, sampling strategies, initial research category formation, and data coding methods. The course will also utilize statistical tools, such as regression analysis, to demonstrate how data can be collected to form statistically significant conclusions. Throughout the course, students will examine a variety of case studies from the field of education to provide practical applications for the topics covered. By the end of the course, students will be equipped with applied research methods that can be used when engaging with stakeholders or evaluating programs within their own organization.

EDAD 8122 Leadership in Education 3 s.h.

In this course students will critically analyze contemporary ways of thinking about leadership. As students examine their present paradigm of leadership, they will also analyze a reconfiguration of leadership that reflects developments in the new sciences and other fields. **Prereq.:** Admission to the doctoral program.

EDAD 8125 Educational Politics and Policymaking in the United States 3 s.h.

Reviews professional literature on politics and policy making at the local, state, and federal level, including the values, institutional actors, processes, and interest groups that shape educational policy. Explores means of identifying problems, analyzing policy alternatives, and measuring policy outcomes. **Prereq.:** Admission to the doctoral program.

EDAD 8126 Legal Issues in Higher Education 3 s.h.

This course explores legal issues and principles that guide the administration of higher education. Students will examine significant issues and trends, past and present, in higher education law to understand the legal environment in which colleges and universities operate. Topics will include academic freedom, student rights (including Title IX), and student conduct.

EDAD 8130 Learning Processes and the Instructional Leader 3 s.h.

A study of current theories and research in the areas of cognition and learning, development and motivation that underlay approaches to teaching in any context.

EDAD 8131 Social Emotional Wellness for Wounded Students from a Leadership Perspective 3 s.h.

Selected topics for a focused study on problems, issues, or concerns that relate to educational leadership. To provide a wealth of strategies for educators who work with students who are beyond the point of at-risk and experienced trauma in their lives and are wounded. By examining key strategies necessary for schools will transform the lives of wounded students socially, emotionally, and academically. Recognizing the effective power of leadership and empathy in creating a sense of community and safety for wounded students, these strategies and resources will meet the needs of wounded children and empower educators to direct students on a path to academic and life success.

EDAD 8135 Building Organizational Culture and Community Partnerships 3 s.h.

Building Organizational Culture and Community Partnerships is designed in accordance with the National Educational Leadership Preparation (NELP) District Level Program Standards, Standard 5. Candidates in this educational leadership preparation course will learn to apply new knowledge and skills to engage families, communities, and related business partnerships to meet student and community cultural and environmental needs. An examination of the school and community culture will contribute to the essential objectives of the course.

EDAD 8140 Seminar in Administrative Theory 3 s.h.

Extension of the administrator's abilities to analyze professional problems, develop leadership strategies, and exercise sound decision making. Nontraditional (nonfunctionalist) theories are stressed, with emphasis on deconstructing and purposefully framing educational issues. Case studies strengthen the application of the theories. **Prereg.**: Admission to the doctoral program.

riereq.: Admission to the doctoral program

EDAD 8141 History of Higher Education 3 s.h.

A course that examines the historical development of post-secondary education in the United States. The purpose of the course is to identify how higher educational institutions have been utilized and situated throughout American history with special attention given to locating the historical context and source of the promise and problems associated with contemporary American higher education.

EDAD 8142 Educational Problem Solving and Ethical Decision Making 3 s.h.

This course will teach students how to make competent leadership decisions by applying and enforcing ethical standards with followers. Ethics is at the heart of leadership. Leaders must make every effort to make ethical decisions and foster ethical behavior among followers. In this course students will explore the ethical demands of leadership. We draw from many fields of research to help students make ethical decisions, lead with integrity, and create an ethical culture. This course is designed to increase students' ethical competence and leadership abilities.

EDAD 8143 Higher Education Finance & Policy 3 s.h.

This course examines the roles of the state and federal government, governing boards, local administrations, and other parties in shaping public policy in higher education. The course will also provide an overview of financial resource management at the institutional level, including the following: budgeting and planning for needs; cost and benefit analysis; public and private grants and gifts; and budget control strategies.

EDAD 8144 Assessment and Evaluation in Higher Education 3 s.h.

This course provides an overview of assessment practices to ensure accountability and inform continuous improvement. Emphasis will be placed on curriculum-based assessment of learning outcomes, measures to improve teaching and learning, and the use of formative and summative evaluation strategies in educational decision-making.

EDAD 8147 Diversity & Equity in Higher Education 3 s.h.

This course is designed to engage students with a critical perspective regarding issues of diversity and equity across higher education. This course will cover the development and acceptance of critical theory in higher education as it applies to race/ethnicity, class, gender, sexuality as well as other expressions of diversity.

EDAD 8155 Seminar in Current Educational Issues 3 s.h.

Informing educational leaders about contextual issues of schools is necessary in order to understand and recognize that school reform, both at the time of its proposal and during the developmental stages of its implementation, is intended to ameliorate educational problems. **Prereq.:** Admission to the doctoral program.

EDAD 8180 Special Topics in Educational Leadership 1-3 s.h.

Selected topics for a focused study on problems, issues, or concerns that relate to educational leadership.

Prereq.: Admission to the doctoral program.

EDAD 8180A Special Topics: Research Methods for the Practitioner 1-3 s.h. Selected topics for a focused study on problems, issues, or concerns that relate to educational leadership.

Prereq.: Admission to the doctoral program.

EDAD 8180B ST Appld Case Stu Methodology 1-3 s.h.

Selected topics for a focused study on problems, issues, or concerns that relate to educational leadership. **Prereq.:** Admission to the doctoral program.

EDAD 8180C ST Prog Eval and Data Mining 1-3 s.h.

Selected topics for a focused study on problems, issues, or concerns that relate to educational leadership.

Prereq.: Admission to the doctoral program.

EDAD 8190 Dissertation Study 1-9 s.h.

Covers the design, proposal, conduct, reporting, and defense of scholarly research that addresses a meaningful topic derived from and contributing significantly to the literature of the field.

Prereq.: Completion of doctoral comprehensive examination.

EDAD 8191 Seminar in Educational Research--Dissertation: Review of Literature 2 s.h.

Students will build knowledge and skills in conducting a literature review to complete Chapter 2 of their dissertation. Writing will be broken down into manageable milestones, following the guidelines set forth by the YSU Educational Leadership Dissertation Guidelines and template.

Prereq.: FOUN 8104, FOUN 8111, and FOUN 8112 or EDAD 8105, EDAD 8114, and EDAD 8115.

EDAD 8192 Seminar in Educational Research: Introduction & Proposal Defense 2 s.h.

This course is the for Doctoral Candidates who are in the process of developing and completing Chapter 1 of their dissertation. Doctoral Candidates will develop Chapter 1 which includes the background to the problem, problem statement, purpose statement, theoretical frame, limitation, operational definitions, methods, etc. relevant to the proposed research study. Finally, they will develop a presentation and defend their proposal to their committee.

Prereq.: Admission to EdD program in Educational Leadership. Prereq. or Coreq.: EDAD 8191 and EDAD 8193.

EDAD 8193 Seminar in Educational Research--Dissertation: Methodology 2 s.h.

Students will build knowledge and skills in developing Chapter 3 of their dissertation. Writing of Chapter 3 will be broken down into manageable milestones, following the guidelines set forth in the YSU Educational Leadership Dissertation Guidelines and template.

Prereq.: Admission to EdD program in Educational Leadership. Prereq. or Coreq.: EDAD 8191.

EDAD 8194 Seminar in Educational Research – Dissertation: Data Collection & Analysis 2 s.h.

The purpose of this course is to build candidate knowledge and skills in developing Chapter 4 of their dissertation. Students will collect the data for their dissertation and complete the analysis of that data and write up their findings in Chapter 4 of their dissertation, broken down into manageable milestones, following the guidelines set forth in the YSU Educational Leadership Dissertation Guidelines and template. **Prereg.**: EDAD 8191. EDAD 8192. and EDAD 8193.

EDAD 8195 Seminar in Educational Research: Dissertation: Results & Discussion 2 s.h.

The purpose of this course is to build candidate knowledge and skills in developing Chapter 5 of their dissertation. Students will discuss the findings and their implications in Chapter 5 of their dissertation, broken down into manageable milestones, following the guidelines set forth in the YSU Educational Leadership Dissertation Guidelines and template. Students will then defend their dissertation to their committee for approval. **Prereq.:** EDAD 8191, EDAD 8192, EDAD 8193, and EDAD 8194.

EDAD 8196 Seminar in Educational Research: Dissertation Defense 2 s.h.

This course is the for Doctoral Candidates who are near the end of the dissertation process. Doctoral Candidates will prepare their dissertation defense and successfully defend their dissertation proposal to their committee. Finally, they will prepare the final version of their dissertation and submit to the Graduate school.

Prereq.: EDAD 8191, EDAD 8192, EDAD 8193, and EDAD 8194.

EDAD 8949 Legal and Ethical Issues in Public Administration 3 s.h.

Defines law and professional ethics and discusses the role of each in public decision making. Explores the status and application of the law in various areas of school operations through the reading of cases, statutes, and constitutional provisions.D. program in Educational Leadership. Ed.D. students who have not taken EDAD 6949 are required to complete EDAD 8949 and include a supplemental, substantive course assignment involving original research using primary source materials in education law and policy. **Prereq.:** Admission to the Ed.

FOUN 6902 Sociological Bases of Education 3 s.h.

Selected sociological concepts and theories will form the basis for a critical analysis of schooling. Special attention will be given to the emergence of schools and to how schools serve diverse populations.

FOUN 6904 Introduction to Educational Research 3 s.h.

Basic methodologies and techniques of educational research design and elementary statistical concepts are introduced. This course relies on critical thinking and analytical discourse for the examination and evaluation of research studies.

FOUN 6914 Statistical Methods in Education 3 s.h.

An introductory course in frequency distributions, measures of central tendency, measures of variability, calculations and meaning of percentiles, normal distribution theory, reliability and validity of measures, and basic statistical analysis.

Prereq.: FOUN 6904.

FOUN 6982 Independent Study/Action Research 1-3 s.h. Individual investigation of advanced topics under the guidance of selected department faculty. May be repeated.

FOUN 6990 Advanced Seminar in Foundations of Education 1-3 s.h. Selected topics for an advanced study of a topic to be addressed from a sociological, historical, philosophical, assessment, or research perspective. Prereq.: Completion of a master's degree or advanced licensure.

FOUN 6995 Workshop in the Foundations of Education 1-3 s.h. A workshop designed for the development of particular skills and/or perspectives on a school-related topic.

FOUN 8102 Perspectives on Leadership Among Diverse Populations 3 s.h. An explorative study of constructs and concepts of cultural diversity within groups based on notions of class, race, sex, ethnicity, ableness, and religion/ spiritualties. Consideration of expectations and organizational practices as informed by diversity issues.

Prereq.: Doctoral admission and one of the following: FOUN 6901, FOUN 6902, or FOUN 6905.

FOUN 8104 Research Strategies in Educational Administration 3 s.h. An examination of major research methodologies and a preview of the different paradigms and assumptions that underlie controlled disciplined inquiries. Techniques associated with particular methodologies in educational administration will be introduced, and their strengths and weaknesses will be analyzed.

FOUN 8111 Advanced Research Design and Statistics 3 s.h.

An in-depth treatment of the major correlational, experimental, and quasiexperimental research designs and associated statistical analyses, including the design and analysis of surveys and factor analytic techniques. Experience in data analysis using SPSS or other statistical packages. 3 s.h. Cross listed with EDAD 8111.

Prereq.: EDAD/FOUN 8104.

FOUN 8112 Qualitative Research for Educators 3 s.h.

Consideration of traditional and evolving qualitative methods and literature that apply to doctoral study of problems in teaching, school leadership, and school change.

FOUN 8113 Theories of Inquiry 3 s.h.

Perspectives for critical analysis, investigation of ways of knowing, and an examination of criteria that have been used successfully for negotiating status and justifying claims within contested domains of inquiry. 3 s.h. **Prereq.:** FOUN 8104 and EDAD 8111/FOUN 8111. **Cross-Listed:** EDAD 8113.

Doctor of Philosophy in Health Sciences

Program Director

Ken Learman, PhD, PT

Director, PhD in Health Sciences

Professor, Physical Therapy

klearman@ysu.edu

Mission:

To prepare the next generation of academics who are excellent researchers, instructors, and are prepared to serve Northeast Ohio and beyond.

Vision:

We aspire to become the premier choice for doctoral preparation of healthcare professionals seeking to transition from the clinic to the classroom or research lah

Admissions requirements:

Adequacy of students

The Ph.D. in Health Sciences is designed to accept students who possess a bachelor's, master's or a clinical doctorate degree. The bachelor's and master's degrees considered should be health related, but will consider students with a basic science degree (ex. biology) if there is an established interest in healthcare. Additionally, there has been a track established for the current entry-level DPT students at YSU to enter a dual DPT/Ph.D. track at the end of their first year in the DPT program. All applicants to the program will be evaluated against the following admission criteria:

Student with an interest in the Health Sciences and an interest in pursuing employment in academia, research, or clinical practice.

Minimum overall 3.0 GPA from a bachelor's or master's degree.

Exceptions will be considered on an individual basis for a GPA of 2.7-2.99. This will mandate a provisional admission.

Graduate Record Examination (GRE) will be required for applicants who currently have a bachelor's degree. Scores of 290 on parts 1 and 2, and 3.5 writing score are recommended.

All applicants applying with a current graduate degree will not be required to take the GRE but will be required to provide 1 example of academic writing and the committee reserves to right to request a second example at their discretion.

If required by the field, a current license to practice.

Names and contact information for three references.

Personal essay of why you are pursuing this degree and what area of research you are intending to pursue.

· A TOEFL score of at least 550 on a paper-based test, the equivalent score on a similar test, or an undergraduate degree from a university in the US.

Admissions will be completed by considering the student's individual research agenda as well as compatibility and availability of faculty to serve on dissertation committees.

Graduate Faculty

Matthew Campbell, Ph.D., ATC, Assistant Professor

Experiential learning in athletic training education; clinical education, youth sports, physical literacy/motor learning; social justice issues in athletic training and athletic training education

Kelly Colwell, Ed.D., Associate Professor

Distance learning; improving patient and family health literacy through education for management of chronic asthma in children; improving access to healthcare in undeserved areas; improving student awareness of the need for cultural competency to better understand, educate, and treat patients in a multi-diverse patient population

Weiging Ge, D.P.T., Ph.D., Professor

Biomechanics; manual therapy including complementary and integrative approaches; telehealth; cultural competence; scholarship in teaching

John M. Hazy, Ph.D., Professor, Chair

Community/behavioral health (drugs and crime); methodology and assessment; life course and cultural issues; teaching effectiveness

Edmund C Ickert, D.P.T., Ph.D., Assistant Professor

Cardiopulmonary programs/outcomes/interventions; falls/fall prevention and outcome; geriatrics; education

Nancy Crum Landgraff, PT, Ph.D., Professor, Chair

Stroke rehabilitation and outcomes

Kenneth Learman, PT, Ph.D., Professor Physical therapy interventions for the spine; concussion management; chronic pain phenotyping; headache differentiation

Kenneth L. Miller, Ph.D., Professor

Measurement of cultural bias and discrimination; child abuse; technology use in clinical supervision; gender equity

Cathy Bieber Parrott, PT, Ph.D., Assistant Professor Orthopedic-related disability measurement; program assessment

Nicolette Powe, Dr.P.H., Associate Professor Health equality; chronic diseases; cancer prevention; healthy lifestyles

Richard Lee Rogers, Ph.D., Associate Professor

Social problems and criminology; organizational and economic sociology; statistics and research methods; social history; Anglo-American religious movements; ecological analysis

Daniel J. Van Dussen, Ph.D., Professor

Social and psychological determinants of health among older adults; the family; social support; statistics and methods

Affiliated Faculty

Chad Cook

Clinical examination and conservative or surgical treatment of orthopedics

Debbie Espy

Human movement science; neurological rehab; biomedical engineering

Degree Requirements

Candidates that enroll with a bachelor's degree will complete all core courses (60 s.h.) and an additional 30 s.h. as approved by the Program Director. These courses can be an individualized plan using existing master's courses in the College of Health and Human Services, the Gerontology program, other master's courses, or Concentration Course Electives in the Ph.D. program.

COURSE	TITLE	S.H.
HRS 8921	Evidence Based Practice in Health Sciences	3
HRS 8935	Epidemiology in Health Sciences	3
HRS 8941	Psychosocial and Cultural Aspects of Healthcare	3
HRS 8942	Mental and Behavioral Aspects of Healthcare	3
HRS 8960	Higher Education in Health Sciences	3
HRS 8961	Classroom Management & Teaching Strategies in Health Sciences	3
HRS 8962	Mentored Instruction	3
HRS 8970	Scientific Writing in Health Sciences	3
HRS 8990	Graduate Research in Health Sciences	12
HRS 8995	Dissertation in Health Sciences	18
CRJS 6940	Statistical Techniques in Health and Human Services	3
CRJS 6945	Research Methods in Health and Human Services	3
Total Semester Ho	urs	60

Total Semester Hours

Learning Outcomes

By graduation from the Doctor of Philosophy in Health Sciences program, students will:

- 1. Propose a research study utilizing appropriate statistical or assessment techniques to answer a question based on an identified gap in the literature
- 2. Apply scientific evidence to specific patient/client cases in their fields.

- 3. Explain how psychosocial and mental & behavioral factors impact healthcare outcomes of various disease processes relate to their area of research.
- 4. Design a study to answer an original research question regarding the teaching andragogy in Health Sciences education.
- 5. Communicate their original research both verbally and through manuscripts submitted for publication in academic journals.
- 6. Apply interdisciplinary research skills to solve current and future problems as professionals in Health Sciences.

Doctor of Philosophy in Materials Science and Engineering

Program Coordinator

Dr. Clovis A. Linkous 5001 Ward Beecher Science Hall (330) 941-1958 calinkous@ysu.edu

Program Description

The Doctor of Philosophy (Ph.D.) in Materials Science and Engineering is a cutting-edge program, employing state-of-the-art analytical materials instrumentation not found anywhere else in the area between Cleveland and Pittsburgh. Incorporating the research activities from the YSU Center of Excellence in Materials Science and Engineering (CEMSE) and the Ohio Hub for Innovation and Opportunity in Advanced Materials Commercialization, this program promotes the synergistic interaction of industrially focused research efforts of faculty, students, and commercial research partners leading to economic development of the region. The Ph.D. is specifically targeted at producing graduates who can find employment as industrial research scientists or engineers.

Application Procedure

Program information may be obtained from the College of Science, Technology, Engineering and Mathematics and from the Ph.D. Program (http:// www.ysu.edu/academics/science-technology-engineering-mathematics/ materials-science-and-engineering-phd/) webpage. Application information may be obtained from The Office of Graduate Admissions in Coffelt Hall (http://www.ysu.edu/gradcollege/) and from Ph.D. Program admission (http:// cms.ysu.edu/college-graduate-studies/domestic-admissions/) webpage. All application materials must be submitted though the online application system. (https://ysu.elluciancrmrecruit.com/admissions/pages/welcome.aspx)

Application Requirements

Students with a B.S. or M.S. in materials science, materials engineering, or related fields (including chemistry, physics, or mechanical, chemical, electrical or civil engineering) can be admitted through the College of Graduate Studies on a competitive basis up to the capacity of the program.

Requirements for admission to the Ph.D. program include the following:

- B.S. or M.S. degree in materials science, materials engineering, or related fields (including chemistry, physics, or mechanical, chemical, electrical or civil engineering);
- Cumulative undergraduate grade-point average of at least 3.0 on a 4.0 scale, or a graduate GPA of 3.3/4.0;
- GRE scores are required. Scores in the following ranges generally reviewed favorably: Verbal = 500-800, Quantitative = 650-800, and Analytical Writing = 4.0-6.0;
- For students whose native language is not English, a TOEFL score of 550 (or comparable score on a similar test)
- · Completed application (application link).

- Resume
- Statement of intent
- 3 references

All applications will be reviewed by an admissions committee consisting of the program director and a group of program faculty of sufficient breadth to interpret the credentials of all members of the applicant pool. *The selection/ admission process is competitive; meeting eligibility criteria does not assure admission into the program.* Applications received as complete by February 1st will have full consideration for fall admissions and graduate assistant opportunities.

Graduate Faculty

Snjezana Balaz, Ph.D., Associate Professor Structure of surfaces of thin films, semiconductors, and nanoclusters

Vamsi Borra, Ph.D., Assistant Professor

3D electronics; Flexible electronics; Electronic materials; reliability testing; Controlled whisker growth; thin-film fabrication and characterization; and condensed matter physics-related research

Kyosung Choo, Ph.D., Associate Professor

Heat and mass transfer; multiphase flow; phase change phenomena; data center cooling; energy audit of buildings; microchannel heat exchangers; linear friction welding; laser welding; kinetics of human body performance

Richard Albert Deschenes, Jr., Ph.D., Assistant Professor Materials science; concrete durability and materials; applied mechanics

Douglas T. Genna, Ph.D., Professor

Metal-organic frameworks;Synthesis of new materials; Mechanistic investigations of self-assembly; targeted materials for water and blood detoxification

Clovis Linkous, Ph.D., Professor

Ceramic electrolytes, polymer membrane electrolytes, solid state hydrogen storage, photovoltaic materials, photocatalysis; flexible and optically transparent conductors

Holly J. Martin, Ph.D., Associate Professor

Corrosion studies; modification of metal surfaces to strongly adhere polymeric coatings for corrosion resistance

Byung-Wook Park, Ph.D., Assistant Professor

Engineered biohybrid materials for biomedical applications; biohybrid microswimmers for drug delivery and bioimaging; wearable bioelectronics for chronic wound monitoring; smart wound dressing

Donald Priour, Ph.D., Associate Professor

Theoretical condensed matter physics, particularly related to systems of technological relevance where the flow of charge or fluid is modified or inhibited by disorder in the form of random inhomogeneities or severed wires or bonds

Jae Joong Ryu, Ph.D., Associate Professor

Effect of process induced anisotropic microstructure on sliding contact fatigue damage of titanium alloy joint implants; mechanical load assisted dissolution response of medical#grade metals and alloys

Virgil C. Solomon, Ph.D., Professor

Synthesis of shape memory alloys, ceramic-metal composites and nanostructures and their characterization using metallography, thermal analysis and analytical scanning and transmission electron microscopy techniques

Timothy R. Wagner, Ph.D., Professor, Chair

Synthesis of inorganic oxide and mixed-anion materials; structure characterizations using single crystal and powder X-ray diffraction; electron microscopy techniques

Degree Requirements

- 90 Semester Hours of Graduate Study
- Qualifying exam, based on the topics presented in the core curriculum, following the second year of study.
- Recommended internship program, usually through full-time paid employment at a partner company.
- Written research proposal, describing the work to be completed for the dissertation. The proposal will be presented orally and defended in front of the dissertation committee.
- Oral presentation of research accomplishments, approximately mid-way through the dissertation research at Seminar.
- Dissertation defended orally to the dissertation committee, which will also approve the final written document. Completion of the dissertation is the culminating experience of the Ph.D. program.

Coursework

COURSE	TITLE	S.H.	
Materials Science and Engineering Course Core			
MATL 7010	Analytical Methods for Materials Science 1	3	
MATL 7020	Analytical Methods for Materials Science 2	3	
MATL 8010	Structure of Materials	3	
MATL 8020	Mechanical Properties of Materials	3	
MATL 8030	Thermodynamics and Phase Behavior	3	
MATL 8040	Kinetics, Diffusion, and Rate Processes	3	
MATL 8050	Materials Internship ^{or electives}	6	
MATL 6990	Seminar in Materials Science and Engineering	3	
Materials Science and Engineering Research Core			
MATL 6982 and I	MATL 8060 combined must equal 51 s.h.		
MATL 6982	Graduate Research		
MATL 8060	Dissertation		
Electives			
Select 12 s.h. of Electives.			
Total Semester H	lours	90	

Special Notes

College of Graduate Studies policies concerning transfer credits, time limits, and other academic matters must be followed.

https://ysu.elluciancrmrecruit.com/admissions/pages/welcome.aspx

Learning Outcomes

- The student will have developed a fundamental understanding of the structure of matter at the atomic/molecular level, particularly in the solid state, and its influence on the physical and chemical properties of a substance.
- The student will have developed a familiarity with the instrumental tools of materials research, including microscopy, spectroscopy, and mechanical testing.
- The student will have developed the personal organizational and disciplinary skills to grasp a research problem involving a lengthy program of investigation, break it down into a sequence of tasks, and follow them through to a conclusion.
- The student will have developed sufficient writing skills to prepare laboratory reports, research papers, journal articles, and an organized dissertation comprising a hundred pages or more.

Graduate Courses

MATL 6982 Graduate Research 1-6 s.h.

Individual investigation of advanced topics under the guidance of selected program faculty. May be repeated for a maximum of 30 semester hours. ,.

MATL 6990 Seminar in Materials Science and Engineering 1 s.h.

Presentations of ongoing research in materials science and engineering. Includes presentations by guest speakers, faculty and graduate students. May be repeated for a maximum of 3 semester hours.

MATL 7010 Analytical Methods for Materials Science 1 3 s.h.

A laboratory course where the student will receive hands-on training with instruments commonly used in materials research. Techniques covered include electrical response methods, spectroscopic methods, X-ray techniques, and thermal analysis and surface profiling techniques. (2 hour lecture/3 hour lab).

MATL 7020 Analytical Methods for Materials Science 2 3 s.h.

A laboratory course where the student will receive hands-on training with instruments commonly used in materials research. Instruments covered include light microscopes, scanning electron microscopes, transmission electron microscope, focused ion beam, X-ray photoelectron spectrometer, Auger spectrometer, X-ray microscope, and dynamic mechanical analyzer. (2 hour lecture/3 hour lab).

MATL 8010 Structure of Materials 3 s.h.

A study of the structure/property relationship of materials at the electronic, atomic, and molecular level. Using quantum chemistry, symmetry, chemical bonding and electrochemistry, this course will introduce the student to the classification and properties of amorphous, crystalline, and semi-crystalline structures including metals, semiconductors, ceramics, polymers, and hybrid materials. The properties to be studied include mechanical, thermal, electrical, and magnetic properties.

MATL 8020 Mechanical Properties of Materials 3 s.h.

This course addresses the mechanical behavior of materials, assuming knowledge of elasticity, plasticity, fracture and creep, and aims to provide a robust analytical treatment of these topics across size scales and material types. The course is split into three sections: (a) Continuum mechanics, (b) Advanced phenomena in mechanics of materials, and (c) Case studies focused on the design and processing of materials. **Prereq.:** MATL 8010.

MATL 8030 Thermodynamics and Phase Behavior 3 s.h.

Detailed examination of chemical equilibria and chemical changes with an emphasis on the theoretical basis for these phenomena and the properties of phase diagrams. The use of computer models for chemical equilibrium calculations utilizing extensive thermodynamic databases.

MATL 8040 Kinetics, Diffusion, and Rate Processes 3 s.h.

Essential topics covered include diffusion in solids and liquids; complex motion of dislocations and interfaces; complex kinetics of phenomena such as phase transformations and morphological evolution; and the rate at which these and other kinetic phenomena occur. **Prereq.:** MATL 8030.

MATL 8050 Materials Internship 1-6 s.h.

Supervised experience in approved external industrial, government lab, or other comparable environment, working on advanced problems in materials. For materials science and engineering doctoral students or by permission of program coordinator. May be repeated for a maximum of 6 semester hours. **Prereq.:** MATL 8020.

MATL 8060 Dissertation 1-9 s.h.

Design, proposal, completion, and reporting of scholarly research deemed acceptable to the program faculty. Culminates in an oral presentation to dissertation committee.

Prereq.: completion of qualifying exam and research proposal.

Doctor of Physical Therapy

Department Chair

Dr. Nancy Landgraff B321 Cushwa Hall (330) 941-2703 nlandgraff@ysu.edu

Welcome

Welcome! Our entry-level Doctor of Physical Therapy (DPT) Program offers academically-talented students an opportunity to join a profession that contributes in countless ways to movement and health.

We are proud of the quality of our faculty and students. We have wellcredentialed faculty-many hold doctorates and/or advanced specializations. Many of our courses are team-taught by faculty in a case-based approach that helps students keep clinical practice in mind. Practice labs typically have two or three full-time faculty supervising and instructing students. Also, students practice hands-on skills with faculty in our Pro Bono Clinic. In addition, the faculty work hard to meet each student's individual needs. Students work well together, learning to make clinical decisions and to be part of an exciting profession.

We are interested in attracting students who are self-motivated learners, willing to be active participants in the teaching-learning process. We also welcome other physical therapists to collaborate with us on clinical research or education. The coming years will be some of our best. Join us!

Vision

To be a nationally recognized Doctorate of Physical Therapy program at the forefront of education, research, and community impact.

Mission Statement

To educate and empower physical therapy professionals through innovative and evidence-based practices, fostering community engagement and interdisciplinary collaboration.

Program Description

The Doctor of Physical Therapy program is a professional program for the preparation of physical therapists. The program is an entry-level, postbaccalaureate program consistent with the accreditation requirements of the Commission on Accreditation in Physical Therapy Education (CAPTE). Admitted on a competitive basis, students enter the 2.5 year (8 semester) program of professional coursework and clinical education affiliations.

Admission Requirements

Admission to the Physical Therapy program is competitive. Meeting eligibility standards does not guarantee admission. Admissions are selective. The admission deadline will be posted on the Physical Therapy website (http://www.ysu.edu/academics/bitonte-college-health-and-human-services/physical-therapy-dpt/).

Students should apply to the physical therapy program if the following eligibility requirements are met:

- 1. A minimum overall GPA of 3.2 on a 4.0 grading scale.
- 2. A 3.0 GPA in prerequisite courses. A minimum of 6 courses completed prior to applying. All prerequisite courses must be completed with "C" or better. See the Physical Therapy website (http://www.ysu.edu/ academics/bitonte-college-health-and-human-services/physical-therapydpt/) for specific prerequisite requirements.
- 3. Completion of a bachelor's degree, and all prerequisite courses, prior to starting the program.

- Documentation of 40 observation hours (paid or volunteer) under the direct supervision of a physical therapist(s) in a physical therapy setting. Two sites are recommended.
- 5. References: 3 total, a combination of physical therapists and faculty.

Accreditation Information

The Doctor of Physical Therapy Program at Youngstown State University is accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE), 3030 Potomac Ave., Suite 100 Alexandria, Virginia 22305-3085; telephone: 703-706-3245; email: accreditation@apta.org; website: http:// www.capteonline.org (http://www.capteonline.org/).

Current accreditation was granted in 2014 for 10 years. The next accreditation visit will be in 2025.

Degree Requirements

There are three areas of program requirements that must be satisfactorily completed to be granted the D.P.T. degree:

- professional coursework,
- professional conduct,
- clinical affiliations.

Students not making satisfactory progress may be required to repeat that year of the program or be dismissed based on established standards.

There are three levels of coursework in the D.P.T. program.

COURSE	TITLE	S.H.			
Level I: Foundation	Level I: Foundation Courses (waiveable)				
PHYT 8810	Human Gross Anatomy	6			
PHYT 8800	Clinical Pathology 1	3			
PHYT 8801	Clinical Pathology 2	3			
Level II: Core Cours	ses				
PHYT 8902	Functional Anatomy	4			
PHYT 8901	Clinical Decision Making 1	6			
PHYT 8905	Clinical Decision Making 2	6			
PHYT 8907	Special Topics: Pediatrics	3			
PHYT 8909	Clinical Decision Making 3	6			
PHYT 8911	Special Topics: Geriatrics	2			
PHYT 8913	Management and Leadership in Physical Therapy	2			
PHYT 8914	Clinical Education 1	5			
PHYT 8916	Critical Inquiry in Physical Therapy	3			
PHYT 8918	Professional Issues	2			
PHYT 8919	Clinical Education 2	9			
PHYT 8920	Clinical Education 3	12			
PHYT 8923	Community Applications	3			
PHYT 8925	Applied Neuroscience for Physical Therapists	4			
PHYT 8929	Clinical Decision Making 3: Advanced Cases	3			
PHYT 8933	Clinical Foundation Skills	4			
HAHS 5875	Interprofessional Education for Health Professions	3			
PHYT 8945	Clinical Decision Making 4	6			
PHYT 8950	Therapeutic Exercise	2			
PHYT 8921	Evidence Based Practice in Health Sciences	3			
PHYT 8935	Epidemiology in Health Sciences	3			
PHYT 8940	Interdisciplinary Health Care Delivery	3			
PHYT 8941	Psychosocial & Cultural Aspects of Healthcare	3			
Level III: Electives	-optional				
PHYT 8938	Special Topics in Physical Therapy				
PHYT 8922	Research				

Students are not required to take electives to be granted the D.P.T. degree.

Total Semester Hours

109

Learning Outcomes

- 1. Students will be able to formulate a differential diagnosis regarding a patient and judge if a patient is appropriate for physical therapy evaluation and treatment.
- 2. Students will be able to effectively plan, organize, implement and assess a plan of care for a patient/client of all complexities of movement system problems across all contexts of care.
- 3. Students will be able to provide effective patient and family education regarding the physical therapy intervention and the patient's pathology.
- 4. Students will demonstrate ongoing commitment to professional conduct consistent with the APTA core values.
- 5. Students will effectively relate the scientific evidence to patient cases and physical therapy questions.
- 6. Students will apply knowledge of laws and ethics to patient management.
- 7. Students will be able to discuss the impact of the changing Healthcare environment on Physical Therapy practice and formulate appropriate responses.
- 8. Students will demonstrate effective verbal and written communication skills.

Graduate Courses

PHYT 8800 Clinical Pathology 1 3 s.h.

Study basic concepts of clinical pathology, imaging, histology, and pharmacology used in Physical Therapists clinical decision making. Study human disease processes and tissue injury and their effect on body structure and function. Learn relationships between pathology and clinical signs and symptoms, diagnostic imaging techniques, histological findings, etiology, differential diagnosis, prognosis, and treatment.

PHYT 8801 Clinical Pathology 2 3 s.h.

Study human disease processes and tissue injury and their effect on body structure and function. Learn relationships between pathology and clinical signs and symptoms, diagnostic imaging techniques, histological findings, etiology, differential diagnosis, prognosis, and treatment.

PHYT 8810 Human Gross Anatomy 6 s.h.

Knowledge of anatomy is essential in the practice of healthcare. In this course we will concentrate on the study of human gross anatomy, which includes the structure of the body and body parts that can be studied with the unaided eye. This course will include examination of the musculoskeletal, nervous and circulatory systems. This course will primarily encompass structural and functional relationships with clinical perspectives that relate to healthcare. **Prereq.:** BIOL 3705.

PHYT 8901 Clinical Decision Making 1 6 s.h.

Decision-making process for clinical management of uncomplicated cases in practice patterns. Emphasis on posture and movement assessment, safety, body mechanics, and monitoring physiological status. The course includes integrated hands on practice into lectures and class sessions.

PHYT 8902 Functional Anatomy 4 s.h.

Study of kinetics, kinematic variables, and mechanical properties of tissue; motion analysis: posture, gait and functional activities; environmental contexts and constraints, and life span applications. Four hour lecture per week.

PHYT 8905 Clinical Decision Making 2 6 s.h.

Decision making process for clinical management of both routine and less common cases in practice patterns. Emphasis on outcomes research, personnel supervision, individualized and culturally-sensitive intervention, and program design.

Prereq.: Admission to DPT program.

PHYT 8906 Critical Inquiry 1 3 s.h.

Develop skills needed to create and answer clinical questions including: use of technology to obtain information: evaluation and application of the information for decision making. Examine the application of current literature to clinical decision making. Emphasis on written research communication methods: scientific writing, documentation and literature reviews. Examine the use of qualitative, quantitative and non-experimental research in health care that are used to inform physical therapy practices. Introduction of group research projects as a means of clinical inquiry.

PHYT 8907 Special Topics: Pediatrics 3 s.h.

Theories of human growth and development and application to typical and atypical motor development and illnesses or injuries of children. Clinical management of cases across the practice patterns with emphasis on family/ caregiver participation, team approach, and setting-specific expectations. **Prereq.:** Admission to DPT program.

PHYT 8909 Clinical Decision Making 3 6 s.h.

Evaluation of decision-making process for clinical management of complex and complicated cases. Emphasis on reimbursement, professional development, interprofessional activities, and program evaluation. **Prereq.:** Admission to DPT program.

PHYT 8911 Special Topics: Geriatrics 2 s.h.

Theories of life span development and human aging with application to systems development and dysfunction. Emphasis on prevention, well elderly, and illnesses/injuries common to the elderly. Clinical management of cases, considering functional goals; cognition; pharmacology; and reimbursement issues. Two hour lecture.

PHYT 8913 Management and Leadership in Physical Therapy 2 s.h.

Theories of resource planning, management strategies for utilizing resources (human, information, fiscal, and space/equipment) for health care delivery, and clinical management issues in various physical therapy settings. Two hour lecture.

PHYT 8914 Clinical Education 1 5 s.h.

This is a first-time, intermediate, full-time, 6-week clinical education experience (CEE). It is the first in a sequence of three experiences across the curriculum. This experience introduces the student to the general organization and operations of physical therapy practice as it pertains to the care of diverse patients/ clients being served in the inpatient or outpatient setting. It emphasizes the early phases of development toward entry-level PT competencies in professional practice and patient management across the lifespan. The student is responsible, under the direct supervision of a licensed physical therapist, for the examination, evaluation, diagnostic, prognostic, and intervention aspects in the delivery of patient care. The specific content and context of clinical practice for this experience will vary depending upon the learning experiences available and the perceived or declared readiness of each student. 210 practicum hours per semester. Grading is S/U.

PHYT 8916 Critical Inquiry in Physical Therapy 3 s.h.

Student groups will analyze datasets and write up manuscripts for the methods, results and some discussion. Groups will peer review these written reports. Student groups will then revise the report and design a clinically-related project based on the findings of the project. Emphasis will be given to formal research proposals, clinical applications, and resources for project implementation. Three hour lecture.

PHYT 8918 Professional Issues 2 s.h.

Discussion of professional topics related to entry-level practice, such as leadership, interagency and interprofessional collaboration, future trends and technologies, and opportunities for professional growth. Two hour lecture.

PHYT 8919 Clinical Education 2 9 s.h.

This is a terminal, full-time, 12-week clinical education experience (CEE). It is the second in a sequence of three experiences across the curriculum in which all didactic curriculum is completed. This experience provides the student the opportunity to participate in physical therapy practice that pertains to the care of diverse patient/ client populations in an inpatient or outpatient setting. It emphasizes the on-going and progressive development toward entry-level PT competencies in professional practice and patient management across the lifespan. The student is responsible, under the direct supervision of a licensed physical therapist, for the examination, evaluation, diagnostic, prognostic, and intervention aspects in the delivery of patient care. Additionally, students are expected to function as part of a multi-disciplinary team and to participate in practice for this experience will vary depending upon the learning experiences available and the perceived or declared.

PHYT 8920 Clinical Education 3 12 s.h.

This is a final, terminal, full-time, 15-week CEE; the third in a sequence of three across the curriculum. All didactic curriculum is completed. This experience provides students the opportunity to fully participate in PT practice that pertains to the care of diverse patient populations in an inpatient/ outpatient setting & within the context of transforming society. It emphasizes the development of entry-level PT competencies in professional practice & patient management across the lifespan. The student is responsible, under the direct supervision of a physical therapist, for examination, evaluation, diagnostics, prognostics, & interventions of patient care. Students are expected to fully function as part of a multi-disciplinary team & participate in practice management activities in the capacity of an entry-level physical therapist. The content & context of clinical practice for this experience varies depending upon the learning experiences available & perceived or declared readiness of each student. Grading is S/U.

PHYT 8921 Evidence Based Practice in Health Sciences 3 s.h.

This course will help the student develop skills needed to formulate and answer clinical questions including: use of technology to obtain information, evaluation and application of the information for decision making needed to answer questions. Examine the application of current literature to clinical decision-making. Emphasis on written research communication methods: scientific writing, documentation and literature reviews. Three hour lecture.

PHYT 8922 Research 1-6 s.h.

Research under the supervision of a graduate faculty member. May be repeated for a total of six semester hours.

Prereq.: Admission to DPT program, and permission of instructor and department chair.

PHYT 8923 Community Applications 3 s.h.

Community-based project that encompasses the aspects of advocacy, collaboration, social responsibility, consultation and leadership, marketing/PR, and fiscal management. Three hour lecture.

PHYT 8923C CE Community Applications 3 s.h.

Community-based project that encompasses the aspects of advocacy, collaboration, social responsibility, consultation and leadership, marketing/PR, and fiscal management.

PHYT 8925 Applied Neuroscience for Physical Therapists 4 s.h.

Introduction to the anatomy and physiology of the human central and peripheral nervous systems. Interaction and relationships between the various structures are described in order to understand movement, sensation and higher cortical functions. Structure is related to function through clinical case examples with an emphasis on the importance for physical therapy assessment and intervention. Four hour lab.

PHYT 8929 Clinical Decision Making 3: Advanced Cases 3 s.h. In-depth analysis of patient/client cases which includes pharmacology influences and diversity aspects. Differential diagnosis skills will be further developed in respect to each case. Evidence-based practice will be emphasized. Three hour lecture.

PHYT 8933 Clinical Foundation Skills 4 s.h.

Theories of professionalism in Physical Therapy practice including APTA/OPTA membership and benefits, fiscal responsibility, core values, professionalism, patient and professional advocacy, communication skills, safety, and healthcare compliance will be discussed. Basic patient assessment as it relates to anatomic principles will be taught and practiced and their clinical relevance will be reinforced. **Prereq.:** Admission to DPT program.

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PHYT 8935 Epidemiology in Health Sciences 3 s.h.

The course will discuss various research designs and appropriate statistics germane to epidemiology. Common measures of effect will be discussed with appropriate interpretation of these effects. The student will be expected to implement their knowledge of the subject by designing or redesigning a study specific to epidemiological principles within their area of interest. **Prereq.:** Admission to Physical Therapy Department.

PHYT 8938 Special Topics in Physical Therapy 1-5 s.h.

Special interest physical therapy topics selected by the faculty which reflect current trends and issues in physical therapy practice. May be repeated as desired.

Prereq.: Admission to the DPT program.

PHYT 8940 Interdisciplinary Health Care Delivery 3 s.h.

Foundational knowledge and skills necessary for legal and ethical practice of pertinent healthcare disciplines (Physical, Occupational, and Speech Therapy, Dietetics, etc.). Emphasis is on legal principles and concepts; contract, business, and educational law; licensure and state practice acts. Emphasis is placed on ethical theory and ethical decision making approaches; and professional code of ethics. Global study of the delivery of healthcare in a broad spectrum view is provided. Emphasis is on the societal, economic, legal/ ethical and cultural factors that influence healthcare. Multidisciplinary views of healthcare are considered.

Prereq.: Admission to Physical Therapy Department.

PHYT 8941 Psychosocial & Cultural Aspects of Healthcare 3 s.h.

Investigation into the psychosocial and cultural issues related to a variety of common clinical pathologies. The dynamic impact of the interaction between the patient/client and persons involved in their healthcare, professionals and caregivers will be considered. Topics of interest include mental, physical, behavioral, and cultural issues across the lifespan. Cultural theory and its applications to clinical interactions will be examined and integrated. Topics include cultural assumptions and patterns of health-related activity related to: disability, socioeconomic status, age, gender, ethnicity/race, sexual orientation, and religion. Three hour lecture.

PHYT 8945 Clinical Decision Making 4 6 s.h.

Topics that integrate practice systems (musculoskeletal, neuromuscular, cardiopulmonary, and integumentary) such as multiple trauma, burns, amputations, orthopedics, neurologic diseases and critical care. Also includes complex cases within routine diagnoses, due to severity, chronicity or comorbidity. Emphasis on outcomes studies. **Prereq.:** Admission to DPT.

PHYT 8950 Therapeutic Exercise 2 s.h.

Provides a wide variety of therapeutic exercises and integrates key principles of exercise physiology with clinical application to several movement impairment diagnoses. Engages in exercise prescription, progression, regression, and modification strategies, through lecture, discussion, and lab. Content will include synthesizing therapeutic exercise principles with patient specific factors related to the components of the ICF-model. Students will have an opportunity to design and carry-through exercise programs for a patient's plan of care.

PHYT 8962 Mentored Instruction 3 s.h.

Course is taken on an individual basis with an assigned faculty member during which the student assists in all teaching aspects of the undergraduate or entry-level course selected by the student. Individualized mentoring in the teaching-learning process is the focus of the course. Student will assist in course planning, syllabi construction, student facilitation, and student assessment.

Prereq.: TCED 6936 or equivalent.

PHYT 8970 Scientific Writing in Health Sciences 3 s.h.

PHYT 8970 will address four major areas of written communication for the scientific process: institutional review board, grant writing, thesis/dissertation, and writing for manuscript submission. This course will engage the student in the activity of writing clear and concise documents that are readable to large diverse audiences while remaining technically proficient. The course will address common pitfalls to written communication and will culminate in a project that is peer reviewed.

PHYT 8990 Graduate Research in Health Sciences 1-6 s.h.

PHYT 8990 is a graduate research experience that will allow the student the opportunity to contribute to research that is directed by an individual faculty mentor and refine their thinking on research design and implementation. This course will facilitate the student's formulation of a potential dissertation topic or provide opportunity to create foundational work for their dissertation.

Graduate Faculty

Felicia P. Armstrong, Ph.D., Professor

Environmental chemistry of soils; water quality; ecotoxicology; soil remediation

Shannon Joy Dudash, DPT, GCS, WCC, Assistant Professor Older adults, fall risk management, integumentary, clinical education, integration of stress relief practices into graduate school curriculum

Weiqing Ge, D.P.T., Ph.D., Professor

Biomechanics; manual therapy including complementary and integrative approaches; telehealth; cultural competence; scholarship in teaching

Edmund C lckert, D.P.T., Ph.D., Assistant Professor Cardiopulmonary programs/outcomes/interventions; falls/fall prevention and outcome; geriatrics; education

Nancy Crum Landgraff, PT, Ph.D., Professor, Chair Stroke rehabilitation and outcomes

Kenneth Learman, PT, Ph.D., Professor Physical therapy interventions for the spine; concussion management; chronic pain phenotyping; headache differentiation

Cathy Bieber Parrott, PT, Ph.D., Assistant Professor Orthopedic-related disability measurement; program assessment

Rebecca Sue Riblet, D.P.T., Assistant Professor

Omar Ross, D.P.T., O.C.S., Assistant Professor Alternative methods of anatomy instruction

Annie Q. Tapp, D.P.T., Assistant Professor Implementation science, stroke, Parkinson's disease, high intensity training, vestibular rehabilitation

Educational Specialist in School Psychology Introduction

The school psychology program is housed in the Beeghly College of Liberal Arts, Social Sciences and Education. Students who successfully complete 45 credit hours of coursework are awarded the Master of Education (M.Ed.) degree in Intervention Services. An additional 54 credit hours are required for the awarding of the Educational Specialist (Ed.S.) degree in School Psychology. Candidates must also pass the PRAXIS II examination in school psychology for licensure in the State of Ohio and for certification by the National Association of School Psychologists (NASP). (Please note the following are required for admission to the Educational Specialist degree: Successful completion of the YSU M.Ed. In Intervention Services, demonstration of successful skills as evidenced by grades and disposition ratings throughout the program, and a successful Ed.S. admissions interview.)

The program provides a curriculum that is comprehensive, integrated, and sequential. It follows the school psychology standards set forth by the State of Ohio, NASP, and the Council for the Accreditation of Education Preparation (CAEP). Courses reflect current advances in the field of school psychology and education. In addition, the program has a unique emphasis in low incidence disabilities. The program is committed to implementing and integrating the most current technology.

The school psychology program is structured so that course content is accompanied by appropriate field experiences. Practicum experiences are designed to provide students with opportunities to practice skills that are required in professional practice while under direct supervision. Practicum experiences occur in conjunction with specific courses and are individualized in terms of setting and assignment to a field supervisor.

Full-time study in school psychology (M.Ed and Ed.S.) generally constitutes a three-year sequence. To develop the needed specific competencies and to meet the training goals of the YSU school psychology program, candidates during the first year of study complete coursework in counseling, educational, and psychological foundations at the master's level.

For more information about the School Psychology program, contact the Office at 330-941-3257 or visit our website (http://catalog.ysu.edu/ undergraduate/colleges-programs/college-education/department-counselingspecial-education-school-psychology/).

Welcome

Our program is designed to prepare graduates with the necessary knowledge, skills, and dispositions to serve as school psychologists. Youngstown State University offers a Master of Education in Intervention Services as the initial degree required for admission to the Educational Specialist in School Psychology program. The School Psychology program at YSU enrolled its first class of candidates in 2012 and graduated its first class of School Psychologists in August 2015. Graduate students will find a unique educational experience that prepares them for a career in School Psychology. I encourage you to review the website and to contact the program director below.

Jeffrey Coldren, Ph.D. Chair / Professor Department of Psychology Sciences and Counseling 330-941-1617 jtcoldren@ysu.edu

Program Director

For specific questions about the School Psychology program, please contact the program director:

Carrie R Jackson, Ed.D., Assistant Professor crjackson01@ysu.edu

Accreditation

The School Psychology program within the Department of Counseling, School Psychology, & Educational Leadership, achieved full national recognition as a NASP (National Association of School Psychologists) approved program through Fall 2024 - https://www.nasponline.org/

Admission Requirements

The Youngstown State University school psychology program is a cohortbased program and will accept students on a full-time time basis. Part-time positions in the program are limited and are only considered when space is available. The first year of the program commences during the summer. The requirements for applying to the YSU School Psychology program are:

- Successful completion of the YSU Master of Education in Intervention Services, demonstration of successful skills and dispositions, as evidenced by grades and disposition ratings throughout the program, and a successful Ed.S. admissions interview.
- Application Deadlines:

Fall: June 15th

Spring: October 15th

Summer: March 15th

Graduate Faculty

Carrie R. Jackson, D.Ed., Assistant Professor Applied behavior analysis; autism spectrum disorders; neuropsychology; transition planning/vocational assessment

Richard W. VanVoorhis, D.Ed., Professor

Role and function of school psychologists; career development and counseling topics; special education service delivery; low incidence disabilities; assessment and identification issues

Requirements for Ed.S. Degree in School Psychology

Successful completion of the following 54 credit semester hours as listed below:

- · Successful completion of 22 required credit semester hours;
- · successful completion of 11 practicum required credit semester hours;
- · successful completion of 21 internship credit semester hours;
- · successful completion of EDS comprehensive exam;
- · approval of professional internship competency notebook; and
- successful completion of Change Project (Capstone experience partial fulfillment of SPSY 7512 Internship/Supervised Experience 1, SPSY 7513 Internship/Supervised Experience 2, and SPSY 7514 Internship/ Supervised Experience 3 requirements).

Required Courses for the Education specialist Degree in School Psychology

COURSE	TITLE	S.H.
Required Courses		
SPSY 7500	Dynamic Assessment 1	3
SPSY 7503	Dynamic Assessment 2	3
SPSY 7506	Behavior Assessment Practicum 2	3
SPSY 7507	Principles of ABA in School Psychology	3
SPSY 7508	Principles of Neuropsychology For the School-Based Setting	3
SPSY 7510	Professional Development Seminar in School Psychology: Internship Preparation	1
SPSY 7511	Professional Issues in School Psychology	3
Practicum Courses	3	
SPSY 7501	Dynamic Assessment Practicum in School Psychology 1	3
SPSY 7502	Cognitive Ability, Observations Practicum	2
SPSY 7504	Behavior Assessment/Intervention Practicum	3
SPSY 7505	Academic Assessment/Intervention Practicum	3
SPSY 7490	Advanced Study and Practicum in Autism Spectrum Disorders	3

Internship Courses

Total Semester Hours		54
SPSY 7516	Advanced Seminar in School Psychology 2	3
SPSY 7515	Advanced Seminar in School Psychology 1	3
SPSY 7514	Internship/Supervised Experience 3	3
SPSY 7513	Internship/Supervised Experience 2	6
SPSY 7512	Internship/Supervised Experience 1	6
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Learning Outcomes

- Candidates will have knowledge and applied skills necessary to demonstrate school based data-based decision making and accountability.
- 2. Candidates will have knowledge and applied skills necessary to demonstrate effective consultation and collaboration.
- Candidates will have knowledge and applied skills necessary to promote interventions and instructional support to develop student academic skills.
- Candidates will have knowledge and applied skills necessary to promote interventions and mental health services to develop student social and life skills.
- 5. Candidates will have knowledge and applied skills necessary to promote school wide practices to promote learning.
- Candidates will have knowledge and applied skills necessary to promote family-school collaboration services.
- Candidates will have knowledge necessary to understand diversity in development and learning.
- 8. Candidates will have knowledge and applied skills necessary to conduct research and program evaluation.
- 9. Candidates will have knowledge and applied skills necessary to understand and demonstrate appreciate legal, ethical, and professional practice.

Graduate Courses

SPSY 5965 School Psychology - Special Topics 1-5 s.h. Selected topics related to intervention and current interest in the school of psychology field of study. Grading is S/U.

SPSY 6901 School Consultation 3 s.h.

Overviews current educational practices that have made collaboration essential to the way educational 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 candidates to function as collaborative consultants promoting systematic and planning strategies for use within the public schools, in collaboration with families, to provide services to children with disabilities. Ed. in Intervention Services Candidate. **Prereq.:** M.

SPSY 6902 Ecological School-Based Observation and Practice 3 s.h. Provides candidates in the school psychology program with the opportunity to observe and participate in a variety of educational settings and experiences designed to support students with all types of disabilities and all grade levels. Through these activities, candidates will understand the organization of educational services, school-based systems, and student population characteristics as well as ecological factors that help to support learning. **Prereq.**: MEd in Intervention Services Candidate.

SPSY 6904 Crisis Prevention and Response 3 s.h.

An overview of the concepts of crisis intervention theory in crisis counseling and assessment including techniques for assessment, intervention, and referrals within a crisis situation. Different types of crises will be discussed with emphasis on selecting appropriate strategies for various situations. The NASP PREPaRE model of crisis prevention and response will be highlighted. **Prereq.:** MEd in Intervention Services Candidate.

SPSY 6905 Equitable Practices In Diversity and Inclusion 3 s.h.

Introduces pertinent theoretical cultural issues which relate to school psychologists as they work with diverse populations. Through lecture, discussion, and individual and group activities, candidates will develop multicultural competence allowing for appropriate individual and systemic interventions to be developed and implemented effectively. Candidates will explore their own level of cultural sensitivity as well as how their behavior impacts others, recognizing their own privilege and striving toward social justice in the educational setting.

Prereq.: MEd in Intervention Services Candidate.

SPSY 6906 Role and Function of the School Psychologist 3 s.h.

This course provides an overview of the professional concerns and issues school psychologists face working in public school systems. Additionally, orientation for field-based practicum and internship experiences will be discussed, as well as future responsibilities for employment as a school psychologist. Historical, legal, professional, and ethical issues pertaining to the role and function of a school psychologist will be reviewed. **Prereq.:** MEd in Intervention Services Candidate.

SPSY 6907 Psycho-Educational Assessment Practices in the Schools 3 s.h.

This course is designed to provide an overview of the relevant concepts, principles and methods underlying the construction and interpretation of psychological and educational tests. Through lectures, discussion, and individual and group activities, candidates will learn about the basic concepts, competencies, issues, and tools used in psychological testing and measurement and their practical applications. In this course, candidates will gain knowledge of how psychological tests are built, what they can and cannot do, the conditions under which they should and should not be used, and how to evaluate their adequacy.

Prereq.: School Psychology Candidacy.

SPSY 6908 Research Design and Statistics for School Psychology 3 s.h. This course takes a user-oriented approach to principles of research design, descriptive and inferential statistics, measurement, and varied data collection and analysis techniques as applied to the practice and scholarship of school psychology.Ed. in Intervention Services track. **Prereq.**: M.

SPSY 6909 Identification and Support for Students with Disabilities 3 s.h. An overview of special education identification procedures for students with disabilities. Candidates will develop knowledge of the definitions, assessment techniques, instructional considerations, and legislation surrounding all lowand high-incidence disabilities. Emphasis will be on the current most effective practices and research-based strategies for students with disabilities. **Prereq.**: MEd In Intervention Services Candidate.

SPSY 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).

SPSY 6912 School-Based Multi-Tiered Systems of Support 3 s.h. This course is designed to provide direct experiences in planning and evaluating multi-level academic and behavioral interventions across the three tiers of services within educational school systems for general education and students with disabilities. Intervention effectiveness metrics (effect size, percentage of non-overlapping data, goal attainment scaling) necessary for practicum and internship experiences will be covered. Participation in Response to Intervention (RtI) team meetings and concepts of curriculum, academic and applied functional behavioral analysis, progress monitoring, and determining effectiveness of interventions will be presented. **Prereq.**: MEd in Intervention Services Candidate.

SPSY 7490 Advanced Study and Practicum in Autism Spectrum Disorders 3 s.h.

This course is designed to provide candidates with skills and experience related to early assessment and diagnosis of Autism Spectrum Disorder (ASD), including case conceptualization, the skills needed to create, modify, and/or adapt assessments, the ability to interpret assessments, classroom applications, implementation and evaluation of strategies and supports, and family-school collaboration. Special emphasis will be given to the application of ABA principles to classroom settings (discrete trial, analysis of verbal behavior, and direct instruction). Through didactic teaching and experiential learning via activities completed with students attending the Rich Center for Autism, candidates will gain knowledge of assessment, evidence-based interventions, treatment methods, and related issues affecting students with ASD and their families.

Prereq.: EdS track in School Psychology.

SPSY 7500 Dynamic Assessment 1 3 s.h.

This course includes the administration and interpretation of traditional, web-based, and iPad-based intelligence tests. The goal of this course is to provide candidates with a series of experiences which will lead to mastery in the administration, scoring, and interpretation of various cognitive and instruments. Candidates will become familiar with various traditional and alternative definitions of intelligence, gain knowledge of the general rules for administration and scoring of a variety of standardized cognitive assessment measures. Candidates will demonstrate mastery in the administration and scoring of various cognitive assessment batteries e.g., most current Wechsler, Kaufman, and Woodcock-Johnson test batteries. Candidates will also be introduced to academic achievement measures associated with these cognitive assessment batteries.

Prereq.: EdS in SPSY Candidate.

Coreq.: SPSY 7501 and SPSY 7502.

SPSY 7501 Dynamic Assessment Practicum in School Psychology 1 3 s.h. Supervised experience in the administration and scoring of cognitive and academic achievement assessment protocols utilizing the most current Wechsler, Kaufman, and Woodcock-Johnson test batteries. Candidates will demonstrate competence in recording observations, scoring assessments, generating hypotheses, and interpreting assessment results. Candidates are expected to share evaluation findings through presentations and written reports.

Prereq.: EdS in SPSY Candidate. **Coreq.:** SPSY 7500 and SPSY 7502.

SPSY 7502 Cognitive Ability, Observations Practicum 2 s.h.

Through in-person and feedback from video recorded sessions, candidates will gain supervised experiences in the administration of various psychoeducational instruments. Candidates will demonstrate mastery through formal observations of their administration and scoring for various cognitive and academic achievement measures utilizing the most current Wechsler, Kaufman, and Woodcock-Johnson test batteries. **Prereq.:** EdS in School Psychology Candidate.

Coreq.: SPSY 7500 and SPSY 7501.

SPSY 7503 Dynamic Assessment 2 3 s.h.

This course is designed to provide candidates with a theoretical foundation and the attainment of assessment skills in the areas of comprehensive academic achievement, perceptual-motor, language, social-emotionalbehavioral, vocational, and adaptive behavior assessments. Other informal assessments will be included such as interviewing, observing, conducting record reviews, etc. Topics such as scoring, interpretation, integration, decision-making, and intervention design will be included. **Prereq.:** EdS in SPSY Candidate, Candidates must have obtained a "B" or better and reached competence in SPSY 7500, SPSY 7501, and SPSY 7502.

SPSY 7504 Behavior Assessment/Intervention Practicum 3 s.h.

Candidates are provided with supervised practica experiences in school systems in each of the following areas: utilization of a systematic, ecological approach to child study; familiarization with a variety of child study approaches including individualized classroom management, instructional materials, and teaching methodology; and furthering experience with the role of the school psychologist as a consultant. SPSY 7504 requires practicum hours to be spent in activities related to observations, interviews, and the completion of a Functional Behavioral Assessment/Behavior Intervention Plan. Candidates must have obtained a "B" or better and reached competence in SPSY 7500, SPSY 7501, and SPSY 7502.

Prereq.: EdS in SPSY Candidate. Coreq.: SPSY 75013 and SPSY 7505.

SPSY 7505 Academic Assessment/Intervention Practicum 3 s.h.

Candidates are provided with supervised practica experiences in school systems in each of the following areas: utilization of a systematic, ecological approach to child study; demonstrating competencies with respect to technology, diversity, collaboration, and professionalism; and conducting and participating in staffing procedures. SPSY 7505 requires practicum hours to be spent in the administration/interpretation of 7501 and 7503 assessment instruments and the completion of a comprehensive Multi-factored Evaluation Team report.

Prereq.: EdS in SPSY Candidate, Candidates must have obtained a "B" or better and reached competence in SPSY 7500, SPSY 7501, and SPSY 7502. **Coreq.:** SPSY 7503 and SPSY 7504.

SPSY 7506 Behavior Assessment Practicum 2 3 s.h.

Candidates will collaborate in the development of both an FBA and BIP for a student in their practicum placement site through direct student observation, informal and formal data collection methods, progress monitoring, and collaboration with IEP team. Candidates will collaborate in generating hypotheses and in the development of individualized interventions, as well as examining effectiveness of interventions via progress monitoring. Candidates will analyze/interpret evaluation and intervention data through the completion of written reports (FBA, BIP, and ETR/RR, if applicable). **Prereq.:** EdS in SPSY Candidate.

Coreq.: SPSY 7507.

SPSY 7507 Principles of ABA in School Psychology 3 s.h.

This course will develop and strengthen knowledge, understanding, and practical skills related to basic principles of applied behavior analysis (ABA) and behavior modification techniques. Candidates will gain knowledge of the principles and components imperative in conducting functional behavioral assessments (FBAs) and developing effective behavior intervention plans (BIP) in the educational environment. At the conclusion of this course, candidates will be able to construct a functional assessment interview (FAI), conduct an FBA utilizing appropriate data collection methodologies to address behavior(s) of concern, develop a BIP utilizing FBA data, select appropriate empirically supported intervention(s), and evaluate the effectiveness of implemented intervention(s).

Prereq.: EdS in SPSY candidate.

Coreq.: SPSY 7506.

SPSY 7508 Principles of Neuropsychology For the School-Based Setting 3 s.h.

The relationship of learning and brain function will be explored through awareness of neuropsychological processes, including normal and atypical development. The principles and practices of neuropsychology in the context of school-based settings will be explored, including assessment, identification, collaboration, research-based intervention, and rehabilitation for schoolaged children with neuropsychological difficulties. Neuropsychology topics related to autism spectrum disorder (ASD) and low incidence disabilities will be emphasized.

Prereq.: EdS in SPSY Candidate, SPSY 7500, SPSY 7501, and SPSY 7502.

SPSY 7509 Family, School, & Community Systems 3 s.h.

This course helps candidates understand how school psychologists interact within and among various systems to identify patterns of needs; plan and implement individual, family, and system wide interventions; and conduct program evaluation. Candidates are expected to engage in various experiential activities to enhance their professional roles in the community and schools, and through their work with families.

Prereq.: Selected Candidate in Masters of Education in Intervention Services.

SPSY 7510 Professional Development Seminar in School Psychology: Internship Preparation 1 s.h.

This course is designed to prepare and ready school psychology candidates for their proposed internship assignment. Preparation tasks includes an overview of the internship experience, interviews with university and field supervisors/school administrators, discussions related to various internship expectations, coverage of time management principles required for the internship year, and various activities related to internship state licensure. **Prereq.:** EdS in SPSY candidate.

SPSY 7511 Professional Issues in School Psychology 3 s.h.

This course involves various ethical and legal principles that have relevance to professional practice (i.e., assessing limits of competency, addressing potential dilemmas, utilizing available resources, coverage of landmark court cases, and understanding personal values and biases). Candidates are expected to fully understand and practice NASP Principles for Professional Ethics. Candidates are afforded the opportunity to review and practice various special education compliance mandates (i.e., timelines, documentation, parent rights, I.E.P development, etc.).

Prereq .: EdS in SPSY Candidate.

SPSY 7512 Internship/Supervised Experience 1 6 s.h.

Designed for those candidates who have been assigned a 1400-clock-hour internship in the state of Ohio under field and university supervision. 6 s.h. 6 s.h.

SPSY 7513 Internship/Supervised Experience 2 6 s.h.

Designed for those candidates who have been assigned a 1400-clock-hour internship in the state of Ohio under field and university supervision. 6 s.h. 6 s.h.

SPSY 7514 Internship/Supervised Experience 3 3 s.h.

Designed for those candidates who have been assigned a 1400-clock-hour internship in the state of Ohio under field and university supervision. 6 s.h. 6 s.h.

SPSY 7515 Advanced Seminar in School Psychology 1 3 s.h.

First of two-semester seminars (special topics related to school psychology internship, child study, serving low incidence populations, consultation, RTI and other topics related to the internship experience). **Prereq.:** concurrent with SPSY 7512.

SPSY 7516 Advanced Seminar in School Psychology 2 3 s.h.

Second of two-semester seminars (special topics related to school psychology internship, child study, serving low incidence populations, consultation, RTI and other topics related to the internship experience). **Prereq.:** concurrent with SPSY 7513.

Master of Arts in American Studies

As of fall 2021, admission to the graduate program in American Studies has been suspended.

Applications to the program are not being accepted at this time.

Program Director

Dr. Daniel Ayana 541 DeBartolo Hall (330) 941-1609 dayana@ysu.edu (dvsisco@ysu.edu)

Program Description

The Master of Arts in American studies program is designed to provide students with training in the content, theory, and methods for studying the history and culture of the United States and is designed to provide both training and experience in developing and implementing public humanities and educational programs. Special emphasis is placed on the application of the humanities in community, museum, and school settings. The program offers a core of courses in American studies, art and literature, history, working-class studies, and public practice, along with opportunities to work in local museums, schools, community projects, and other public humanities programs. Courses for the program have been drawn from five different colleges, providing students the chance to gain a truly broad and diverse education while deepening their knowledge of American culture. The M.A. in American studies also offers a teaching track designed for secondary school teachers.

As of fall 2021, admission to the graduate program in American Studies has been suspended.

Applications to the program are not being accepted at this time.

Admission Requirements

Students must have a cumulative grade point average in undergraduate study of 3.0 (on a 4.0 scale). The bachelor's degree may be in any field, but students should have taken at least 12 hours of upper-division coursework in some combination of the arts, humanities, and/or social sciences. Applicants must include a personal statement detailing goals and decision for pursuing graduate study in American Studies.

Graduate Faculty

John M. Hazy, Ph.D., Professor, Chair Community/behavioral health (drugs and crime); methodology and assessment; life course and cultural issues; teaching effectiveness

Martha Pallante, Ph.D., Professor Early American studies; material culture; pedagogy

As of fall 2021, admission to the graduate program in American Studies has been suspended.

Applications to the program are not being accepted at this time.

Degree Requirements

Students must complete 36 semester hours of coursework at the graduate level.

COURSE	TITLE	S.H.
Required Core Cou	irses	
AMER 6900		
AMER 6990	Independent Project ¹	
Practice Area		
Select two credits	from one of the following tracks:	6
Teaching Track	:	
Select two of th		
ENGL 6906	Teaching of Literature	
ENGL 6907	Teaching of Writing	
ENGL 6974	English Education Workshop	
ENGL 6976	Studies in English Education	
HIST 6950	Studies in the Teaching of History	
Public Practice Track		
SED 6935		
AMER 6930		
Focus Area		

	r courses from one of the following areas:	12
Cultural Studies		
ANTH 6910	Special Anthropological Problems	
ART 5881	Twentieth Century Art to 1960	
ART 5882	Twentieth Century Art from 1960	
ENGL 6915	Early American Studies	
ENGL 6917	Nineteenth-Century American Studies	
ENGL 6922	Twentieth-Century American	
ENGL 6923	Working Class Literature	
ENGL 6965	Studies in Film	
FNLG 6900	Seminar	
HIST 5806	American Architectural History 1	
HIST 5807	American Architectural History 2	
HIST 6940	Oral History	
SOC 6900	Special Sociological Problems	
American History		
HIST 6910	Readings in American History	
HIST 6912	Research Seminar in American Colonial History	
HIST 6913	Research Seminar in 19th-Century America	
HIST 6914	Research Seminar in 20th-Century America	
HIST 6941	American Material Culture	
Working-Class Stu	dies	
ENGL 6923	Working Class Literature	
HIST 6939	Labor in US History	
HIST 6945	Interpretation and Preservation of the Industrial Built Environment	
Public History		
EDAD 6933	Educational Leadership and Organizational Change	
ENGL 6944	Document Design and Production	
ENGL 6953	Publications Issues and Management	
ENGL 6992	Professional Communication	
HIST 5810	Conservation of the Historic Built Environment	
HIST 6942	Applied History	
HIST 5810	Conservation of the Historic Built Environment	
HIST 6942	Applied History	
HIST 6943	Practicum in Applied History	
HIST/ENGL 6946	Historical Editing	
HIST 6955		
HIST 6956		
HIST 6957	Special Topics in Applied History	
Distribution Requin	rement	
Select four additio foucus areas abov	nal course with at least one from each of the other e.	12
requires each stu • a major rese		₹S,
-	nd promotion of a special exhibit at a museum,	
	ment of an education program at a local library, or	
•	ion of a planning project in cooperation with a local development agency.	

Students will work closely with a committee of YSU faculty and community specialists to design and implement their individual projects.

Learning Outcomes

- Students will analyze the various ways in which American culture is complex and diverse. Understanding American culture requires attention to how American diversity is reflected in the ideas, events, trends, texts, and issues created and used by Americans in everyday life as well as in community life and politics.
- Students will explore and practice strategies for doing interdisciplinary analysis, which relies on the development of complex inquiry, selection of appropriate materials and concepts from a wide array of options, and the application of appropriate methods for interpreting and integrating diverse sources.
- 3. Students will create papers and projects in courses that demonstrate their ability to effectively communicate cultural knowledge and analyze why and how their choices are effective. This requires students to make appropriate choices about format, content, organization, and the use of evidence based on one's purpose, audience, and situation.
- Students will develop connections between campus and community through papers, projects, and internships that apply the academic work to realms beyond the academy.
- 5. Students will plan, develop, write, and publicly present original research through their independent (thesis) projects.
- 6. Students will acquire professional experiences appropriate to the field of American Studies.

Graduate Courses

AMER 6990 Independent Project 1-3 s.h. Completion of individual project in a community or school setting. May be repeated for a maximum of three semester hours. Prereq.: Proposal and review meeting with committee.

Master of Arts in English

Program Director

Dr. Lucas Hardy, Graduate Director 240 DeBartolo Hall 330-941-3420 Ihardy01@ysu.edu

Program Description

The Master of Arts program in English offers courses in:

- Literary Themes, Genres and Theories
- Creative Writing
- Professional, Public and Technical Writing
- Linguistics, TESOL and TEFL
- Film
- Teaching of Literature, Language and Writing

The English M.A. prepares graduates for careers in public, professional and technical writing; teaching positions in the U.S. and abroad; and equips them with the critical thinking and cultural literacy skills needed for success in nonprofit and private-sector careers.

Graduate Certificates

Graduate certificates in Professional and Technical Writing, Teaching of Writing, and Teaching English to Speakers of Other Languages (TESOL) are available through the Department of English & World Languages. Please see the appropriate information in the Graduate Certificates section of this catalog.

Advising

All students should have their schedules approved by the departmental Director of Graduate Studies every semester.

Admission Requirements

Applicants for the English M.A. are required to submit a 1-2 page statement of purpose explaining why they wish to obtain the M.A. in English. Applicants are required also to submit a short sample of academic prose, preferably an undergraduate class paper.

Graduate Faculty

Corey E. Andrews, Ph.D., Professor Eighteenth-century literature; Scottish Studies; Robert Burns; poetry; bibliography; working-class studies

Diana Awad-Scrocco, Ph.D., Associate Professor Professional and technical writing; medical rhetoric and communication; composition pedagogy; writing center theory and practice

Christopher Barzak, M.F.A., Professor Fiction writing; fiction; contemporary British and American literature

Laura L. Beadling, Ph.D., Professor Gender, race and sexuality in American film; Native American film and culture; comics studies; television studies; rhetoric and composition

Jeffrey M. Buchanan, Ph.D., Chair English education; composition; pedagogy

Maria Conti Maravillas, Ph.D., Assistant Professor

Suzanne Diamond, Ph.D., Professor Cinematic literary adaptations; 19th century British literature and culture; "true crime" media; writing pedagogy

Timothy Francisco, Ph.D., Professor Shakespeare and early modern studies; working-class and inequity studies; humanities education and public policy; media and narrative studies

Jay L. Gordon, Ph.D., Associate Professor Rhetoric; technical and professional communication; document design; pedagogy of writing

Lucas D. Hardy, Ph.D., Associate Professor Early American literature and culture; early modern philosophy; history of medicine

Nicole Pettitt, Ph.D., Assistant Professor Immigrant/refugee education; minority language research ethics

Dolores V. Sisco, Ph.D., Assistant Professor African diaspora studies; postcolonial studies; popular culture

Degree Requirements

All M.A. students must complete 30 semester hours in English (or related) courses at the graduate level; exceptions must have prior approval of the Director of Graduate Studies.

All M.A. students must take:

- 2 courses in Writing, Language, and Discourse (Category A)
- 2 courses in Literature, Text, and Visual Culture (Category B)
- 2 courses in Theory, Method, and Teaching (Category C)
- 4 electives from any of the three categories (A, B, C)
- All M.A. students must complete either a master's portfolio or thesis prior to graduation.

Category A: Writing, Language, and Discourse

COURSE	TITLE	S.H.
ENGL 6944	Document Design and Production	3
ENGL 6946	Historical Editing	3
ENGL 6947	Proposal Writing	3
ENGL 6948	Healthcare Communication	3
ENGL 6949	Professional and Technical Editing	3
ENGL 6950	Sociolinguistics	3
ENGL 6951	Language Acquisition	3
ENGL 6953	Publications Issues and Management	3
ENGL 6955	Advanced Linguistics	3
ENGL 6958	English Grammar	3
ENGL 6966	Writing of Poetry	3
ENGL 6967	Writing of Prose	3
ENGL 6969	Writing the Youth Novel	3
ENGL 6992	Professional Communication	3
ENGL 6998	Professional Writing Internship	1-3
ENGL 6999	Thesis	1-3

Category B: Literature, Text, and Visual Culture

COURSE	TITLE	S.H.
ENGL 6911	The Medieval World	3
ENGL 6912	Sixteenth- and 17th-Century British Studies	3
ENGL 6913	Shakespeare and Renaissance Drama	3
ENGL 6914	Restoration and 18th-Century British Studies	3
ENGL 6915	Early American Studies	3
ENGL 6916	Nineteenth-Century British Studies	3
ENGL 6917	Nineteenth-Century American Studies	3
ENGL 6918	Studies in Children's Literature	3
ENGL 6919	Studies in Young Adult Literature	3
ENGL 6920	Twentieth-Century British Studies	3
ENGL 6922	Twentieth-Century American	3
ENGL 6923	Working Class Literature	3
ENGL 6927	Historical Survey of Literature for Young People	3
ENGL 6935	Studies in Romanticism	3
ENGL 6968	Studies in Literary Form	3
ENGL 6963	Perspectives in Multicultural Studies	3
ENGL 6965	Studies in Film	3

Category C: Theory, Method, and Teaching

COURSE	TITLE	S.H.
ENGL 6900	Methods of Literary Research	3
ENGL 6901	Methods of Composition Research	3
ENGL 6902	Literary Thought	3
ENGL 6906	Teaching of Literature	3
ENGL 6907	Teaching of Writing (Required for Teaching Assistants)	3
ENGL 6943	Public and Professional Writing	3
ENGL 6945	Grant Writing	3
ENGL 6952	Linguistics of Literacy	3
ENGL 6956	TESOL Methods (Prerequisite: ENGL 6951 Language Acquisition)	3
ENGL 6957	TESOL Practicum (Prerequisite: ENGL 6956 TESOL Methods)	3
ENGL 6960	Studies in Linguistics	3

ENGL 6989	Teaching Practicum (Open only to Teaching Assistants; Required for Teaching Assistants)	1-3
ENGL 6976	Studies in English Education	3
ENGL 6993	Discourse Theory	3

Thesis and Portfolio Options

All M.A. students must submit a thesis or portfolio of work completed during their graduate coursework. Handouts on thesis and portfolio guidelines and examples of past theses and portfolios are available from the departmental Director of Graduate Studies.

Students must select a committee consisting of a director and two additional graduate faculty members. This committee must approve a portfolio/thesis proposal. Students must demonstrate through the portfolio/thesis a familiarity with appropriate sources and an ability to interpret the material and properly document their research. Students selecting the thesis option may count up to three semester hours of thesis credit (ENGL 6999 Thesis) toward their total of 30 semester hours of coursework.

The portfolio consists of selected work written during graduate coursework or as part of a professional internship. Students will present the portfolio to a faculty review committee no later than the eighth week of the semester in which they plan to graduate.

Learning Outcomes

English graduate students will demonstrate the ability to produce professionalquality research projects that can be used as the basis for conference presentations or professional publications.

English graduate students will demonstrate the use of a variety of interpretive strategies for analyzing multiple kinds of texts, including close reading, contextual analysis, analysis of form and genre, and rhetorical analysis.

English graduate students will demonstrate the use of theories related to the representation of culture, race, class, gender, and sexuality to interpret literary texts.

English graduate students will demonstrate the ability to participate in the professional life of the discipline as scholars, teachers, editors, and writers.

Graduate Courses

ENGL 6900 Methods of Literary Research 3 s.h. Basic concepts and methods of literary research and analysis. ENGL 6901 Methods of Composition Research 3 s.h. Theories and methods of composition research; emphasis on strategies for conducting, analyzing, and writing about classroom and workplace studies. ENGL 6902 Literary Thought 3 s.h. May focus on particular theoretical approaches or provide an overview of literary criticism. May be repeated once with a different topic. ENGL 6906 Teaching of Literature 3 s.h. Problems, issues, practices, and research that affect the teaching of literature at various grade levels and in college courses. ENGL 6907 Teaching of Writing 3 s.h. Problems, issues, practices, and research that affect the teaching of writing at various grade levels and in college courses. ENGL 6911 The Medieval World 3 s.h. Study of selected literary works reflecting medieval thought and culture. May be repeated once with a different topic. ENGL 6912 Sixteenth- and 17th-Century British Studies 3 s.h. Nondramatic literature of the British Renaissance. May be repeated once with a different topic.

ENGL 6913 Shakespeare and Renaissance Drama 3 s.h.

Varying emphases on the dramatic works of Shakespeare and/or his contemporaries. May be repeated once with a different topic.

ENGL 6914 Restoration and 18th-Century British Studies 3 s.h.

Prose, poetry, and/or drama of the period studied in historical and cultural context and from various critical perspectives. May be repeated once with a different topic.

ENGL 6915 Early American Studies 3 s.h.

Prose, poetry, and/or drama from the colonial period up to the early 19th century examined in their historical and cultural contexts. May be repeated once with a different topic.

ENGL 6916 Nineteenth-Century British Studies 3 s.h.

Prose, poetry, and/or drama of the period studied in historical and cultural context and from various critical perspectives. May be repeated once with a different topic.

ENGL 6917 Nineteenth-Century American Studies 3 s.h.

Examines 19th-century American literature and culture through particular themes, genres, styles, periods, and/or figures. May be repeated once with a different topic.

ENGL 6918 Studies in Children's Literature 3 s.h.

Contemporary children's literature. Emphasis may be on development, trends, critical standards, cultural context, classroom selection and use. May be repeated once with a different topic.

ENGL 6919 Studies in Young Adult Literature 3 s.h.

Contemporary young adult literature. Emphasis may be on development, trends, critical standards, cultural context, classroom selection and use. May be repeated once with a different topic.

ENGL 6920 Twentieth-Century British Studies 3 s.h.

Prose, poetry, and/or drama of the period studied in historical and cultural context and from various critical perspectives. May be repeated once with a different topic.

ENGL 6922 Twentieth-Century American 3 s.h.

Studies. Examines works in relation to the history and social and cultural developments of the period. Nonliterary texts may be included, such as film, visual arts, and music. May be repeated once with a different topic.

ENGL 6923 Working Class Literature 3 s.h.

A study of working-class literature, culture, and artistic production, with emphasis on the literary history, the material conditions, and the intersection of race, ethnicity, gender, and sexual orientation in the works of literature by and about the working class.

ENGL 6927 Historical Survey of Literature for Young People 3 s.h.

Survey of historical developments from the 18th through mid-20th centuries in British and American literature for young people.

ENGL 6935 Studies in Romanticism 3 s.h.

Prose, poetry, and/or drama of the period studied in historical and cultural context and from various critical perspectives. May be repeated once with a different topic.

ENGL 6943 Public and Professional Writing 3 s.h.

Exploration of scholarly and practical approaches for writing for public, professional, and technical audiences. Students examine the use of writing in public and professional organizations, government, nonprofit sectors, safety and health professions, and political and social campaigns. With an emphasis on theories and practices of approaching audience and purpose, students consider rhetorical and ethical demands of writing in public, professional and technical contexts.

ENGL 6944 Document Design and Production 3 s.h.

Application of computer software and hardware to design and produce professional/technical documents.

ENGL 6945 Grant Writing 3 s.h.

Study of various issues and strategies involved in writing grant proposals to help solve a range of problems and support various causes that improve people's lives and communities. Students learn how grant proposals enable significant research in natural, behavioral, and social sciences; facilitate civic and educational projects; and advance community development and artistic initiatives. Students learn the functions and conventions of grant proposals, the range of research required to write grant proposals, and the rhetorical and practical processes that produce them and lead to approval. The course emphasizes two key stages of writing grant proposals: developing the proposal (including defining needs, reviewing existing projects and literature, and researching sources of funds), and writing the proposal with a particular audience in mind.

Prereq.: Graduate Standing.

ENGL 6946 Historical Editing 3 s.h.

Project-based approach to theoretical and practical aspects of editing historical and literary documents for both print and digital contexts. Topics include document selection, transcription, verification, and annotation, as well as the implications for teaching and learning using traditional print and electronic archives and texts. **Cross-Listed:** HIST 6946.

ENGL 6947 Proposal Writing 3 s.h.

Graduate level introduction to the structural, rhetorical, and linguistic aspects of professional proposals, with a focus on grant proposals. Students examine the role of proposals in serving the needs and interests of organizations and individuals. Requirements include writing one grant proposal for a client and one other type of proposal (e.g., a research project proposal or book prospectus).

ENGL 6948 Healthcare Communication 3 s.h.

Graduate level introduction to how healthcare information is conveyed by healthcare researchers, providers, and writers, to experts and non-experts. Students examine how people find and use medical information in making healthcare decisions. Students consider issues of health literacy, research methods, ethics, public and private clinical communication, patient education, and visual design. Requirements include writing a report on a medical talk, a healthcare-related press release, and a client-based healthcare communication project.

ENGL 6949 Professional and Technical Editing 3 s.h.

A study of the skills needed to make appropriate changes in the content, grammar, mechanics, style, format, and organization of manuscripts for scholarly, trade, journalistic, and other professional publications. The course deals with stages in the publishing process, hard-copy versus online editing, mechanical and substantive editing, and the use of house and press styles.

ENGL 6950 Sociolinguistics 3 s.h.

An investigation of the relationship between language and society. Includes discussion of dialects and standard languages, language planning, linguistic identity, multi- and bilingualism, class, gender, ethnicity, and social interaction.

ENGL 6951 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.

ENGL 6952 Linguistics of Literacy 3 s.h.

An investigation of the linguistic, social, and cultural dimensions of literacy. The course covers theoretical frameworks of language and literacy, the relationship between speech and writing, cultural notions of literacy, and the acquisition of literacy in first and additional languages.

ENGL 6953 Publications Issues and Management 3 s.h.

Exploration of the issues involved in managing and producing professional publications, including publications in students' own fields. Focus on organizational, editorial, and authorial voice; editorial policies; audience analysis; and the processes by which publications are conceived, designed, and produced.

ENGL 6954 Language Assessment 3 s.h.

This course seeks to develop the language assessment literacy of teachers and TESOL Endorsement candidates. The content of the course emphasizes theoretical and practical study of instruments and procedures for assessing culturally and linguistically diverse students. Candidates will design and use standardized (formal) and instructional (informal) evaluative methods to learn to assess students' linguistic and academic development, and will conduct critical analyses of existing tools for assessment in terms of their reliability, bias, and validity. Candidates will be able to use assessment to distinguish between levels of language proficiency in decisions of educational plan or placement.

ENGL 6955 Advanced Linguistics 3 s.h.

In-depth study of selected issues in contemporary linguistic theory.

ENGL 6956 TESOL Methods 3 s.h.

Introduction to teaching English as a second language (ESL), including reading, writing, listening, and speaking. Focus will be on using communicative methods with nonnative speakers.

ENGL 6957 TESOL Practicum 3 s.h.

Supervised teaching in an English as a second language (ESL) program. Additionally, weekly seminar attendance is required.

ENGL 6958 English Grammar 3 s.h.

Descriptions and analysis of English grammar structure.

ENGL 6960 Studies in Linguistics 3 s.h.

Examines a specific topic such as stylistics, semantics, sociolinguistics, second language acquisition, TESOL, or computational linguistics. May be repeated twice with a different topic.

ENGL 6963 Perspectives in Multicultural Studies 3 s.h.

An advanced study of primary and secondary texts from the field of multicultural literature and multicultural education. The course will emphasize the formation of social identities, the intersections of race, class, and gender, relationships among dominant and nondominant subjects in U.S. and other global cultures. The course will pay special attention to the theory and application of multiculturalist paradigms to education, professional work, and graduate study. May be repeated once with a different topic.

ENGL 6965 Studies in Film 3 s.h.

Analysis of motion pictures and their creators; topics may include classic and contemporary styles, genres, and methods of production, as well as film theory and criticism. May be repeated once with a different topic.

ENGL 6966 Writing of Poetry 3 s.h.

Discussion and application of approaches, techniques, and forms involved in the writing of poetry. May be repeated once with a different topic.

ENGL 6967 Writing of Prose 3 s.h.

Discussion and application of approaches, techniques, and forms involved in the writing of fiction and/or nonfiction. May be repeated once with a different topic.

ENGL 6968 Studies in Literary Form 3 s.h.

Examines forms such as poetry, the novel, the short story, essay, biography, autobiography, or travel literature. Emphasis may be on definition, development, cultural context, figures, or themes. May be repeated once with a different topic.

ENGL 6969 Writing the Youth Novel 3 s.h.

Discussion and application of approaches, techniques, and forms involved in the writing of novels.

ENGL 6974 English Education Workshop 1-3 s.h.

Intensive study and activity in a topic related to teaching English and the language arts. Does not count toward degree credit. Grading is S/U. May be repeated.

ENGL 6975 English Education Seminar 1-3 s.h.

Approaches to teaching English and the language arts. May be repeated once with a different topic.

ENGL 6976 Studies in English Education 3 s.h.

Theories, issues, and/or criticism in the teaching of English. May be repeated once with a different topic.

ENGL 6989 Teaching Practicum 1-3 s.h.

Techniques and strategies for teaching college composition, including course design and classroom practice. Required of and limited to graduate assistants who are teaching in the English Department. First-year graduate assistants must register for three semester hours of Teaching Practicum in two successive semesters for a total of six semester hours. Does not count toward degree credit. Grading is S/U.

ENGL 6990 Special Topics 3 s.h.

May be repeated once.

ENGL 6991 Special Topics MFA 3 s.h.

Special topics in literature and creative writing for students in the Master of Fine Arts (MFA) program in creative writing. May be repeated once. **Prereq.:** Acceptance in the MFA program.

ENGL 6992 Professional Communication 3 s.h.

Focus on a selected topic in technical writing or professional communication (e.g., proposal writing, science writing, computer documentation, nonfiction prose). May be repeated once with a different topic.

ENGL 6993 Discourse Theory 3 s.h.

Examination and discussion of contemporary theories of discourse analysis, with some attention to the history and development of rhetorical theory.

ENGL 6996 TESOL/Applied Linguistics Internship 1-3 s.h.

Supervised work-and-learn experience for students interested in TESOL (Teaching English to Speakers of Other Languages) and/or applied linguistics. Students spend 3-10 hours per week working for an approved field site, inperson or online. Enrollment is contingent upon the availability of internships. Students must be recommended for this experience by program faculty. ENGL 6996 may be repeated once.

Prereq.: ENGL 6956, ENGL 6957, program faculty recommendation.

ENGL 6997 English Internship 1-3 s.h.

Supervised work-and-learning experience in English under the direction of an English Department faculty member and an employee of a participating firm. Ten to 20 hours a week of student time are expected. Enrollment is contingent upon the availability of internships. Students are selected on the basis of personal qualifications, including GPA, courses taken, recommendations, and an interview. Either ENGL 6997 or ENGL 6998 may count toward the degree, not both.

ENGL 6998 Professional Writing Internship 1-3 s.h.

Supervised work-and-learning experience in professional communication under the direction of a University faculty member and an employee of a participating firm. Ten to 20 hours a week of student time are expected. Enrollment is contingent upon the availability of internships. Students are selected on the basis of personal qualifications, including GPA, courses taken, recommendations, and an interview. Either ENGL 6997 or ENGL 6998 may count toward the degree-not both.

ENGL 6999 Thesis 1-3 s.h. Thesis.

Prereq.: Thesis proposal accepted by departmental committee.

Master of Arts in Gerontology

As of fall 2021, admission to the graduate program in Gerontology has been suspended.

Applications to the program are not being accepted at this time.

Program Director

Daniel J. Van Dussen, Ph.D.

DePizzo Endowed Chair of Gerontology

Professor of Gerontology

440 DeBartolo Hall (330) 941-1683 djvandussen@ysu.edu

Program Description

The curriculum is designed from an interdisciplinary perspective of gerontology with a focus on epidemiology and health. This program will provide students with advanced education in issues facing older adults, for the purpose of preparing them for advancement in the field of gerontology. The program allows for a Thesis or a Non-Thesis track based upon the students' desires and goals. The program consists of 36 semester hours, which may be completed in four semesters of full-time coursework or six semesters part time.

Admission Requirements

In addition to the minimum criteria set by the College of Graduate Studies, applicants must meet the following requirements for full admission:

- 1. A cumulative Grade Point Average of at least 3.0 (on a 4.0 scale).
- 2. Three (3) letters of recommendation from individuals familiar with the students' academic or professional background.
- 3. A letter of intent stating their objectives for seeking a Master's Degree in Gerontology and how this program will help them fulfill their goals.
- 4. A personal interview is optional.
- 5. A Resume or Curriculum Vitae.
- 6. A social statistics course at the undergraduate or graduate level.

Graduate Faculty

Daniel J. Van Dussen, Ph.D., Professor

Social and psychological determinants of health among older adults; the family; social support; statistics and methods

Amy Weaver, Ph.D., Professor Geriatric education; geriatrics; simulation

Degree Requirements

The Master of Arts in Gerontology will consist of 12 courses (36 credit hours) which can be completed over a 2 academic year period.

Thesis Option

COURSE	TITLE	S.H.	
Core Courses			
GERO 6915		3	
GERO 6905	Social Gerontology	3	
PSYC 6957	Advanced Adult Development and Aging	3	
GERO 6906	Perspectives in Gerontology	3	
GERO 6960		3	
GERO 6999		3	
GERO 7090	Field Practicum	3	
GERO 7094	Selected Topics	3	
Thesis			
GERO 7099		3	
Elective			
Select 9 s.h. from t	he following:	9	
GERO 6998			
PSYC 6959			
GERO 7001			
SCWK 7006			
GERO 7090	Field Practicum		

GERO 7094	Selected Topics	
Total Semester	Hours	36
Non-Thesis	Option	
COURSE	TITLE	S.H.
Core Courses		
GERO 6915		3
GERO 6905	Social Gerontology	3
PSYC 6957	Advanced Adult Development and Aging	3
GERO 6906	Perspectives in Gerontology	3
GERO 6960		3
GERO 6999		3
GERO 7090	Field Practicum	3
GERO 7094	Selected Topics	3
Non-Thesis Trac	k	
Field Practicum		3
Elective		
Select 9 s.h. from	n the following:	9
GERO 6998		
PSYC 6959		
GERO 7001		
SCWK 7006		
GERO 7090	Field Practicum	
GERO 7094	Selected Topics	
Total Semester I	Hours	36

Graduate Courses

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.

Master of Arts in History

Admission to the Master of Arts in History has been suspended. Applications to the program are not being accepted at this time. Please the following link for other graduate programs: https:// catalog.ysu.edu/programs/

As of summer 2023, admission to the graduate program in History has been suspended.

Applications to the program are not being accepted at this time.

Program Director

Dr. Daniel Ayana 541 DeBartolo Hall (330) 941-1609 dayana@ysu.edu

Program Description

The Department of Humanities and Social Sciences offers a graduate program leading to the Master of Arts in History. Its curriculum combines American, European, and Transnational areas. The program prepares students for:

- · Doctoral study in history or related fields,
- Advancement in secondary and elementary education with a concentration in history and the social sciences,
- · Certification in applied history, and/or
- · Additional graduate study in a variety of professional areas.

The program also provides the knowledge base for those pursuing history as an avocation. The program concentrates on research and primary materials, written analysis of research results, study of important monographs in a variety of historical fields, and training in a number of specialized fields, such as oral history and historic preservation. The department prides itself on its small classes and close personal attention to all of its master's candidates.

Admission Requirements

Regular admission will be granted to those students who:

- 1. Meet the YSU Graduate College's qualifications for regular admission.
- 2. Hold a bachelor's degree from an accredited college or university
- 3. Have submitted a satisfactory academic writing assignment

Students not meeting these requirements may be considered for provisional admission or non-degree status instead.

Graduate Faculty

Daniel Ayana, Ph.D., Professor Africa; social and economic history

Brian Bonhomme, Ph.D., Professor Nineteenth- and twentieth-century Russian history; environmental history

Eleanor A. Congdon, Ph.D., Associate Professor Medieval; Renaissance; Mediterranean world; maritime history

Amy Fluker, Ph.D., Associate Professor Nineteenth century US; Civil War; culture; memory; gender

Martha Pallante, Ph.D., Professor Early American studies; material culture; pedagogy

David A. Simonelli, Ph.D., Professor Britain; British Empire

Degree Requirements

Degree Requirements

Each candidate for the M.A. in history must complete:

1. A minimum of 30 hours of graduate courses overall

2. At least 21 hours must be in HIST courses; up to 9 hours may be transferred in from other related disciplines with the approval of the Program Coordinator and the Graduate Director. The student wishing to explore course options outside the History Program should obtain approval BEFORE registering for such class(es). Examples of potentially acceptable external disciplines include Geography/GIS, Art History, Literature, Foreign Language, etc.

3. HIST 6900 (Research Methods) and HIST 6901 (Historiography): 6 hours total.

4. Minimum of 9 hours in an area of concentration (US, Europe, or Transnational).

5. Minimum of 3 hours outside area of concentration.

6. Minimum of one "Seminar paper" (at least 18 pages of text/footnotes, using primary and secondary sources, posing and answering a useful historical question). This requirement is NOT fulfilled by the Final Project (see #7), but is in addition to it. A seminar paper is a requirement in all Research Seminar classes, but students may meet the seminar paper requirement in any course, with approval of the instructor and Graduate Director.

7. All students must also complete a "Final Project" - taken in the form of Independent Study (HIST 6952). Depending on the nature of the project and the decision of the supervising History professor, this may be either one or two courses (3 or 6 credits). The decision of the professor supervising the project is final, in terms of the nature of an acceptable project, the number of hours it will be granted, the format and general merit of the project, and the final grade. The Final Project may take the form of a significant research paper and/or comparable project in other formats. Students who are approved to write an MA thesis will do so in the same manner, using up to 6 hours of Independent Study. Part of the Final Project will include mastering a relevant reading list, compiled by the project supervisor in cooperation with the student. Project completion will require that the students defend the completed project. including demonstrating satisfactory facility with the reading/source list, in front of a committee of three professors, chosen by the student in consultation with the relevant faculty and the Graduate Director. Students may only register for their Final Project if they are in Good Standing with the College of Graduate Studies. The same applies to the defense.

8. As long as all other MA requirements are met, students may count graduatelevel Applied History courses taken at YSU (or accepted as transfer credits from another institution) towards the History MA degree, from individual courses up to the entire Certificate in Applied History (minimum of 18 graduate-level credits). Applied History courses are generally considered "American/US" courses. See Applied History Certificate requirements for more information.

COURSE	TITLE	S.H.		
Required courses for the History MA (9-12 hours)				
HIST 6900	Introduction to Historical Research			
HIST 6901	Historiography			
HIST 6952	Independent Study			
Successful completion of Final Project (3 or 6 hours) approved by Graduate Director and Final Project Director (taken as HIST 6952). Final Project must be successfully defended, then deposited with the graduate program director to remain permanently on file.				
Elective courses	(21 hours minimum).	21		
1. At least one course must be from outside student's main geographical concentration				
2. Complete at le Project	2. Complete at least one seminar paper at B or better in addition to Final Project			
3. Complete at le	ast one readings course.			
HIST 5806	American Architectural History 1			
HIST 5807	American Architectural History 2			
HIST 5810	Conservation of the Historic Built Environment			
HIST 6912	Research Seminar in American Colonial History			
HIST 6913	Research Seminar in 19th-Century America			
HIST 6914	Research Seminar in 20th-Century America			
HIST 6920	Readings in Modern European History			
HIST 6921	Research Seminar in Medieval Culture and Society			
HIST 6928	Research Seminar in British Empire			
HIST 6930	Readings in World History			
HIST 6940	Oral History			
HIST 6941	American Material Culture			
HIST 6942	Applied History			
HIST 6943	Practicum in Applied History			

	HIST 6944	Applied History Internship	
	HIST 6946	Historical Editing	
	HIST 6950	Studies in the Teaching of History	
	HIST 6951	Special Topics in History	
	HIST 6952	Independent Study	
	HIST 6957	Special Topics in Applied History	
Foreign language examination is not required.			

A minimum overall GPA of 3.0 (on the 4.0 scale) is required for graduation. No credit is given for a course where the grade is below "C,"but the grade is included when calculating the overal GPA. Consistently low grades are a basis for dismissal from the program.

Total Semester Hours

30-33

Learning Outcomes

- LO1 (All courses): 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. LO2 (All courses): 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.
- LO3 (Applied History Courses): Students will demonstrate the ability to translate traditional historical scholarship into media meant primarily for non-academic audiences.
- LO4 (HIST 6952/Final Project and Research Seminars): Students will demonstrate the ability to employ the skill of the historian to produce an original research project(s) based on primary and secondary sources.

Graduate Courses

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.

Prereq.: HIST 2005 and HIST 2000.

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 5808 American Architectural History 4 s.h.

Focuses on the development and nature of architectural trends in the US, both formal and vernacular styles, in their historic context. Students will learn how to identify historic building materials, evaluate their condition, and make recommendations for their protection. Maybe taken by both undergraduate and graduate students.

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.

HIST 6900 Introduction to Historical Research 3 s.h.

Instruction in the basic tools and techniques of historical research. Required of all candidates for advanced degrees in history.

HIST 6901 Historiography 3 s.h.

An introduction to the professional study of history, including an examination of the sources and nature of historical knowledge, historical criticism, and synthesis. Required of all candidates for advanced degrees in history.

HIST 6910 Readings in American History 3 s.h.

Readings in the standard works and monographic studies to meet the requirements of qualified graduate students who wish intensive concentration in specific areas of American history. May be repeated with permission of instructor.

HIST 6912 Research Seminar in American Colonial History 3 s.h.

Selected problems of early American history. May be repeated with permission of instructor.

HIST 6913 Research Seminar in 19th-Century America 3 s.h. Selected problems of American history, 1800-1865. May be repeated with permission of instructor.

HIST 6914 Research Seminar in 20th-Century America 3 s.h. Selected problems of American history in the 20th century. May be repeated with permission of instructor.

HIST 6920 Readings in Modern European History 3 s.h.

Readings in the standard works and monographic studies to meet the requirements of qualified graduate students who wish intensive concentration in European history. May be repeated with permission of instructor.

HIST 6921 Research Seminar in Medieval Culture and Society 3 s.h. The main intellectual and social currents of the Middle Ages. May be repeated with permission of instructor.

HIST 6922 Research Seminar in Renaissance and Reformation 3 s.h. Trends and aspects of the Renaissance and Reformation. May be repeated with permission of instructor.

HIST 6928 Research Seminar in British Empire 3 s.h.

An examination of major problems confronting the British Empire after 1783. May be repeated with permission of instructor.

HIST 6930 Readings in World History 3 s.h.

Readings in the standard works and monographic studies to meet the requirements of qualified students who wish concentration in world history. May be repeated with permission of instructor.

HIST 6934 Readings in African History 3 s.h.

Readings in the standard works and monographic studies to meet the requirements of qualified graduate students who wish intensive concentration in African history. May be repeated with permission of instructor.

HIST 6939 Labor in US History 3 s.h.

Emphasis on work processes, workforce composition, and labor organizations in the industrial Midwest.

HIST 6940 Oral History 3 s.h.

Instruction in methods of taking, processing, and utilizing oral depositions relating to history. The course includes assignments in the field. May be repeated once.

HIST 6940C CE Oral History 3 s.h.

Instruction in methods of taking, processing, and utilizing oral depositions relating to history. The course includes assignments in the field. May be repeated once.

HIST 6941 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. The emphasis will be on nontraditional sources. Examples include children's books, sacred spaces, and foodways.

HIST 6942 Applied History 3 s.h.

This course provides an overview of the field of applied history. Topics include historic preservation, museum studies, heritage tourism, archives and related topics.

HIST 6943 Practicum in Applied History 3 s.h.

Examines problems in the field of applied history through student participation in a wide variety of community-based projects.

Prereq.: HIST 3715 Introduction to Historic Preservation, HIST 6942, or instructor's permission.

HIST 6944 Applied History Internship 3 s.h.

Practical application of principles and methods in the field of applied history with the goal of producing a completed project. Internship to be selected by the student in conjunction with the Program Director. May be repeated once. **Prereq.:** HIST 6942 and approval of program director.

HIST 6945 Interpretation and Preservation of the Industrial Built Environment 3 s.h.

Through lectures and readings, this course examines and interprets the industrial built environment. This includes, but is not limited to, factories, neighborhoods, infrastructure, and commercial districts that make up the fabric of industrial communities.

Prereq.: Graduate standing and completion of HIST 6942 or permission of instructor.

HIST 6946 Historical Editing 3 s.h.

Project-based approach to theoretical and practical aspects of editing historical and literary documents for both print and digital contexts. Topics include document selection, transcription, verification, and annotation, as well as the implications for teaching and learning using traditional print and electronic archives and texts.

Cross-Listed: ENGL 6946.

HIST 6950 Studies in the Teaching of History 3 s.h.

Investigation and discussion of the research and some of the underlying assumptions in the teaching of history, with implications for the teacher of social studies in the secondary schools and for the prospective history professor. Degree students may receive credit for this course only once.

HIST 6951 Special Topics in History 3 s.h.

Special topics in history selected by the staff. May be repeated up to six semester hours.

HIST 6952 Independent Study 1-3 s.h.

Individual study in concentrated areas of history under the supervision of a staff member. May be repeated.

Prereq.: Permission of the instructor and the graduate director.

HIST 6953 Research, Thesis 1-6 s.h.

HIST 6957 Special Topics in Applied History 1-6 s.h.

This course will focus on topics selected by the applied history faculty. **Prereq.:** HIST 6942.

HIST 6958 Historic Preservation Law 3 s.h.

The study, theory, and practice of law as it relates to historic preservation. **Prereq.:** HIST 3715 or HIST 6942.

HIST 6959 Museum Curation and Interpretation 4 s.h.

Introduction to the field of museum studies. The history and function of museums, especially in the United States. Museum administration, curation, exhibit development, collections management, outreach and education. No formal prerequisites, but students should ideally have completed either HIST 3715 or HIST 6942.

Cross-Listed: HIST 4859.

HIST 6960 Research Seminar in American History 3 s.h.

Guided research in selected topics from any period of American History. May be repeated twice with permission of instructor.

HIST 6961 History Program Internship 1-3 s.h.

Hands-on, experiential learning via an internship at any of a variety of History-Program-approved opportunities and sites in or beyond the Mahoning Valley. Emphasis on the development and application of discipline-related skills including critical-thinking, engagement with research materials, interpretation of sources, organization of materials, presentation of findings, or similar. Internship to be selected by student in consultation with Program Director. May be repeated once.

Prereq.: none.

HIST 6970 Research Seminar in European History 3 s.h.

Guided research in selected topics from any period of European History. May be repeated twice with permission of instructor.

HIST 6980 Research Seminar in World History 3 s.h.

Guided research in selected topics from any period of World History. May be repeated twice with permission of instructor.

Master of Arts in Professional Communication

Program Director Jeffrey Tyus, Ph.D. 2015 Bliss Hall 330-941-1856 jltyus@ysu.edu

Program Description

The Master of Arts degree in Professional Communication is designed for professionals in any organizational setting who wish to develop advanced communication knowledge and skills, as an end in itself or as preparation for a doctoral degree. In profit and non-profit, academic or non-academic settings, the program learning outcomes will be beneficial to anyone, but especially to managers and administrators.

Admission Requirements

In addition to the College of Graduate Studies admission requirements, to be admitted to the MA program, students must submit the following information for consideration.

- · A current resume outlining academic and professional experience
- A letter of interest explaining how the candidate's academic and/or professional experience and goals align with the MA program
- Official transcript(s) documenting a minimum cumulative GPA of 3.0 on a 4.0 scale. The applicant must send one transcript from each college or university attended, except YSU, to Graduate Admissions in Coffelt Hall.
- Three completed recommendation forms
- Evidence of graduate-level writing and critical thinking skills in the form of any one of the following:
 - a 5 to 10 page individual writing sample,
 - or a score of 3.5 or higher on the GRE Analytical Writing assessment,
 - or a score of 155 of higher on the GRE Verbal assessment.

Students who do not meet the requirements for admission to the MA program may be admitted on a provisional basis with a score of 3.5 or higher on the GRE Analytical Writing assessment.

Faculty Research Interests

Communication Studies

Rebecca M. L. Curnalia, Ph.D., Professor

Informational and emotional content and effects of political communications; informational and emotional processing; political knowledge; political attitudes; vote choice; political motives; fear appeals; gender bias; grassroots campaigns

Adam C. Earnheardt, Ph.D., Professor

Sports media and fandom; media ethics; social media platforms; applications and campaigns; interpersonal and organizational conflict management and negotiation; public speaking and communication pedagogy

Cary Wecht, Ph.D., Professor

Nexus of media use and interpersonal communication; communibiology paradigm; business communication; use of media during 9/11; reality television

English (Professional AND TECHNICAL WRITING)

Diana Awad-Scrocco, Ph.D., Associate Professor

Professional and technical writing; medical rhetoric and communication; composition pedagogy; writing center theory and practice

Jay L. Gordon, Ph.D., Associate Professor Rhetoric; technical and professional communication; document design; pedagogy of writing

Marketing

Kendra Fowler, Ph.D., Professor Services marketing; retailing

Bruce Keillor, Ph.D., Professor, Chair Marketing strategy; firm-level political strategy; cross-cultural marketing

Christina Saenger, Ph.D., Associate Professor Consumer behavior; social media; identity; branding

Doori Song, Ph.D., Associate Professor Advertising effect; consumer motivation; information processing; emerging media

Ying Wang, Ph.D., Professor

Integrated marketing communication; brand communication; international marketing; e-marketing

COURSE	TITLE	S.H.	
Core Courses			
CMST 6900	Survey of Communication Graduate Studies	3	
CMST 6980	Qualitative Research Methods	3	
CMST 6990	Quantitative Research Methods	3	
Professional Con	nmunication Skills		
CMST 6953	Group Dynamics: Theory and Research	3	
CMST 6957	American Corporate Culture	3	
Choose three Pro	ofessional Communication Electives	9	
CMST 5845	Communication for Instructors and Trainers		
CMST 5852	Conflict Management and Negotiation		
CMST 5860	Persuasion and New Media		
CMST 5889	Theory of Sports and Communication		
CMST 5898	Seminar		
Choose one Com	pletion Option	6	
Option One: Thes	sis		
CMST 6995	Thesis		
Option Two: Capstone and Internship			
CMST 6970	Internship		
CMST 6994	Capstone		
Total Semester Hours			

Accelerated MA Professional Communication

Undergraduate students can apply for admission into the accelerated program for the MA in Professional Communication after completing 60 semester hours with a GPA of 3.5 or higher. After being admitted into the program, students can take a maximum of nine semester hours of graduate coursework that can count toward both an bachelor's and master's degree from the Department of Communication. The courses chosen to count for both undergraduate and graduate coursework must be approved by the Graduate Director upon admission into the program.

Learning Outcomes

1. Apply theory- and research-based best practices in professional contexts.

2. Produce effective messages for multiple audiences using current technologies.

3. Employ effective strategies for organizing and collaborating.

4. Employ advanced analytical and research skills in professional contexts.

5. Prepare and deliver effective internal and external organizational messages.

6. Present their research at university, state, and regional conferences.

7. Learn how to lead and appreciate an increasingly diverse and inclusive workforce

Graduate Courses

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.:** Junior Standing.

CMST 5860 Persuasion and New Media 3 s.h.

Introduction to persuasion theory and application of theory to new communication media.

Prereq.: Junior standing.

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.:** Junior Standing.

CMST 5898 Seminar 3 s.h.

A cooperative exploration of topics in communication studies. May be repeated up to 6 semester hours.

Prereq.: Junior standing.

CMST 5898X Communication for Teachers and Trainers 3 s.h.

The study of communication theory and practice appropriate instructors and trainers. Theories and application focus primarily on interpersonal communication, group communication, and classroom speaking. **Prereq.:** Junior standing.

CMST 6900 Survey of Communication Graduate Studies 3 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 American Corporate Culture 3 s.h.

Includes instruction in the types of cultures in American organizations, assessments of culture and climate, and best practices for shaping culture and improving climate to promote creativity, productivity, and employee satisfaction.

CMST 6970 Internship 3 s.h.

Communication-related work in a professional setting. **Prereq.:** Special approval required.

CMST 6980 Qualitative Research Methods 3 s.h.

Introduction to and application of qualitative research methods relevant to business communication settings.

CMST 6990 Quantitative Research Methods 3 s.h.

Project-based course covering quantitative research methods, including surveys, experiments, and online analytics. Projects include data collection, analysis, and reporting using industry-standard software and platforms.

CMST 6991 Communication Problems: Independent Study 3 s.h.

Individual study and practical application of communication research principles 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 3 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.

CMST 6996 Thesis 2 3 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 AND CMST 6995.

CMST 6997 Thesis 3 1-3 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 AND CMST 6995 and CMST 6996.

Master of Athletic Training

Program Director

Matthew Campbell PhD, AT, ATC 307L Beeghly Center (330) 941-2576 mjcampbell05@ysu.edu

Program Description

The Master of Athletic Training (MAT) program at YSU prepares students to become critical consumers of healthcare knowledge, preparing students for the Board of Certification examination, and transitioning to professional practice in Athletic Training. Our students have the opportunity to learn from a diverse group of healthcare professionals including EMT's and paramedics, nurses, respiratory therapists, dietitians, physicians, and physical therapists. Our students are provided unique clinical learning experiences from various settings including professional sports, primary care, orthopedics and orthopedic surgery, high school, industrial, and collegiate (DI and DIII). Students learn from faculty and preceptors who are experienced athletic trainers who will provide a multitude of learning opportunities and mentoring as you progress to becoming an athletic trainer and beyond.

New cohorts in the MAT program at YSU will begin annually in May and complete a 64-credit curriculum over a two-year period. Students will be engaged in five clinical experiences throughout their education at YSU, with two dedicated as immersive clinical experiences. The immersive clinical experiences provide students with the ability to participate in the full-time day-to-day role of an athletic trainer, while utilizing skills previously learned throughout the program

Accreditation

The Master of Athletic Training Program at Youngstown State University is accredited by the Commission on Accreditation of Athletic Training Education (CAATE), 2001 K Street NW, 3rd Floor North, Washington, DC 20006; P. 512-733-9700; website: http://www.caate.net (http://www.caate.net/).

The MAT Program has an overall 3-year aggregate pass rate of 87%.

Admission Requirements

- Must be enrolled in YSU's Accelerated Exercise Science degree track or an Affiliated Institution <u>OR</u> have earned a bachelor's degree from an accredited institution prior to the start of the MAT program in May.
- Minimum 3.00 GPA average (based on 4.0 scale) in all coursework taken for the bachelor degree
- Complete the following prerequisite courses with a minimum grade of "C":
 Human Anatomy & Physiology I
 - · Human Anatomy & Physiology II
 - · General Biology I and Lab
 - · General Chemistry and Lab
 - · Physics and Lab
 - · Kinesiology or Biomechanics
 - Exercise Physiology
 - General Psychology
 - Nutrition
 - Statistics
- Domestic student application deadline: May 1
- · International student application deadline: January 1
- Approved Accelerated students should submit application material to the MATadmissions@ysu.edu email address.
- · All other applicants apply via ATCAS
- · All applicants must submit the following materials:
 - Athletic Training Application Form (ATCAS only)
 - · A resume or curriculum vitae
 - · Proof of 50hrs of athletic training observation
 - A personal statement (2pg maximum) of professional and educational goals to address the following:
 - What are your short- and long-term goals (i.e., education, training, work setting, etc.)
 - Discuss personal and professional influences that led you to want to become an athletic trainer and graduate student.
 - Official Academic Transcripts
 - · Interview with Program Faculty and Stakeholders
 - Verification of CPR certification
 - Must be able to meet the minimum technical standard requirements and complete the technical standards document.

Graduate Faculty

Morgan Bagley, Ph.D., AT, ATC, Assistant Professor Lower limb fatigability; aerobic capacity

Matthew Campbell, Ph.D., ATC, Assistant Professor

Experiential learning in athletic training education; clinical education, youth sports, physical literacy/motor learning; social justice issues in athletic training and athletic training education

Omar Ross, D.P.T., O.C.S., Assistant Professor Alternative methods of anatomy instruction

Year 1		
Summer		S.H.
MAT 6901	Emergency and Acute Care (Emergency & Acute Care in Sports Medicine)	3
MAT 6908	Functional Human Gross Anatomy	4
MAT 6902	Foundations of Therapeutic Interventions	3
MAT 6903	Foundations of Athletic Training Clinical Practice	3
	Semester Hours	13
Fall		
MAT 6915	Evaluation of Lower Extremity Pathologies	4
MAT 6916	Therapeutic Interventions 1	3
MAT 6910	Clinical Practice 1	2
MAT 6946	General Medical Conditions Evaluation and Management	3
	Semester Hours	12
Spring		
MAT 6925	Evaluation of Upper Extremity Pathologies	4
MAT 6926	Therapeutic Interventions 2	3
MAT 6930	Clinical Practice 2	2
MAT 6950	Evidence-Based Practice/Research	3
	Semester Hours	12
Year 2		
Summer		
MAT 6936	Head and Spine Evaluation and Management	3
MAT 6938	Clinical Practice 3	2
	Semester Hours	5
Fall		
HAHS 5875	Interprofessional Education for Health Professions	3
MAT 6948	Clinical Practice 4	2
MAT 6927	Capstone Project	3
MAT 6949	Advanced Medical Procedures	2
MAT 6937	Athletic Training Healthcare Administration	3
	Semester Hours	13
Spring		
MAT 6976	Comprehensive Approach to Healthcare	2
MAT 6977	Athletic Training Healthcare Seminar	3
MAT 6978	Clinical Practice 5	4
	Semester Hours	9

YSU MAT "C" Grade Policy

- If a student receives 9 or more credits of "C" grades, regardless of GPA, the student will be dismissed from the program. (1) This determination is per the Graduate College providing programs the freedom to identify the amount of "C." coursework permitted to continue matriculation toward successful completion.
- 2. If a student receives "C" grades in 2 clinical practice/practicum courses, the student will be dismissed from the program (1) This determination is per the Graduate College providing programs the freedom to identify the amount of "C" coursework permitted to continue matriculation towards successful completion. Because successful demonstration of skills, knowledge, and abilities during clinical experiences is the cornerstone of the programs mission, the program firmly believes that student success in these clinical practice courses is vital to their future success as healthcare providers.

Learning Outcomes

- Students will be able to identify injury, illness and risk factors associated with participation in sport/physical activity and implement all components of a comprehensive wellness protection plan and injury prevention program.
- Students will be able to conduct a thorough initial clinical evaluation of injuries and illnesses commonly sustained by the athlete/physically active individual and formulate an initial diagnosis of the injury and or illness for the primary purposes of administering care or making appropriate referrals to physicians for further diagnosis and medical treatment.
- Students will be able to provide appropriate first aid and emergency care for acute injuries according to accepted standards and procedures, including effective communication for appropriate and efficient referral, evaluation, diagnosis, and follow up care.
- Students will be able to plan and implement a comprehensive treatment, rehabilitation and/or reconditioning program for injuries and illnesses, including long and short-term goals, for optimal performance and function.
- 5. Students will be able to plan, coordinate and supervise the administrative components of an athletic training program, comply with the most current BOC practice standards and state/federal regulations, and develop a commitment to life-long learning and evidence-based clinical practice

Graduate Courses

MAT 6900 Basic Athletic Training Laboratory 1 s.h.

This laboratory course is an introduction to psychomotor skills associated with sports and fitness injury recognition, evaluation and management. The course emphasizes the development of competency in essential entry-level athletic training skills. Topics include injury and illness assessment skills, injury prevention techniques, and prophylactic bracing, taping and support techniques.

Prereq.: Admitted to the program.

MAT 6901 Emergency and Acute Care 3 s.h.

This course will provide students the knowledge and skills needed to recognize, evaluate, and treat acute injuries and illnesses and provide the appropriate referral. Students will be presented with concepts to provide care for emergent conditions across the scope of athletic training practice. **Prereq.:** Admission to the Program.

MAT 6902 Foundations of Therapeutic Interventions 3 s.h.

This course is designed to provide students with the foundational knowledge related to the use of manual, mechanical, and physical interventions to enhance the healing process. The student will be able to identify the parameters, indications, contraindications for the use of all interventions and when they are best utilized during the different stages of healing. Students will be presented with knowledge needed to understand how to best establish short- and long-term goals to be used throughout the intervention process. **Prereq.**: Admittance to the Program.

MAT 6903 Foundations of Athletic Training Clinical Practice 3 s.h.

This course is designed to provide students with the foundational knowledge and skills necessary for athletic training clinical practice. Students will gain and understanding of the approach needed to successfully evaluate the functional components of movement, healthcare assessment, durable medical materials and application, and other skills utilized during athletic training clinical practice.

Prereq.: Admission to the Program.

MAT 6905 Psychosocial Aspects of Athletic Injuries 2 s.h.

This course examines issues related to the psychological impact and sociological factors related to exercise, injury, and illness, inactivity and rehabilitation following sports injury. Particular emphasis is placed on developing strategies for identifying problems, intervening, and making referrals for commonly encountered injuries and illnesses. **Prereq.**: Admitted to the program.

MAT 6908 Functional Human Gross Anatomy 4 s.h.

This course examines the systems of the body with primary focus on the musculoskeletal system. Students will be provided with an understanding of a functional approach to muscular origins and attachment, innervation, vascular supply, and action. Foundation knowledge will be enhanced through the use of virtual exposure to the anatomy.

Prereq.: restricted to MAT students, instructor approval.

MAT 6910 Clinical Practice 1 2 s.h.

This course will provide students an integrative experience focused on hands on clinical practice. Skills and knowledge learned in the Year 1 Summer courses will be applied during clinical experiences and through simulated opportunities.

Prereq.: Successful Completion of Summer 1 Courses.

MAT 6915 Evaluation of Lower Extremity Pathologies 4 s.h.

This course will provide students with a comprehensive and evidencebased approach to the evaluation and clinical diagnosis of lower extremity musculoskeletal injuries and illnesses related to pathophysiological and epidemiological factors. Students will learn process for establishing a plan of care and referral necessary for conditions associated with the foot, ankle, knee, and hip complex.

Prereq.: Successful Completion of Summer 1 Courses.

MAT 6916 Therapeutic Interventions 1 3 s.h.

This course is designed to provide students with the interactive approach to the care and intervention of lower extremity injuries and illnesses. Students will develop short- and long-term goals, and problem lists as it relates to early, mid, and late healing phase interventions. The course will focus on the application of these interventions for conditions related to the foot, ankle, knee, and hip complex.

Prereq.: Successful Completion of Summer 1 Courses.

MAT 6920 Therapeutic Modalities 4 s.h.

This course focuses on the use of therapeutic modalities in the treatment and rehabilitation of the injured athlete. The course will present the physiological and mechanical modalities. Students will investigate the current literature on the safe and effective application of various modalities and their appropriate integration into a well-designed rehabilitation program. **Prereq.:** MAT 6900.

MAT 6925 Evaluation of Upper Extremity Pathologies 4 s.h.

This course will provide students with a comprehensive and evidencebased approach to the evaluation and clinical diagnosis of upper extremity musculoskeletal injuries and illnesses related to pathophysiological and epidemiological factors. Students will learn process for establishing a plan of care and referral necessary for conditions associated with the fingers, hand, lower and upper arm, elbow, and shoulder complex. **Prereq.:** Successful Completion of Fall 1 Courses.

MAT 6926 Therapeutic Interventions 2 3 s.h.

This course is designed to provide students with the interactive approach to the care and intervention of upper extremity injuries and illnesses. Students will develop short- and long-term goals, and problem lists as it relates to early, mid, and late healing phase interventions. The course will focus on the application of these interventions for conditions related to the fingers, hand, lower and upper arm, elbow, and shoulder complex.

Prereq.: Successful Completion of Fall 1 Courses.

MAT 6927 Capstone Project 3 s.h.

This course will provide the student with the structure and support to develop an authentic Critically Appraised topic inquiry. The course will build on content addressed in previous courses too allow students to search, review, critique, and appraise the current research and evidence available. Each student will produce a written product critiquing the available literature to further understand best practices healthcare on their given area of interest. Students will be expected to submit the final product for submission in a professional research journal.

Prereq.: Successful completion of Summer Courses.

MAT 6930 Clinical Practice 2 2 s.h.

This course will provide students an integrative experience focused on hands on clinical practice. Skills and knowledge learned in the Year 1 Fall courses will be applied during clinical experiences and through simulated opportunities. **Prereq.:** Successful Completion of Fall 1 Courses.

MAT 6935 Athletic Training Organization and Administration 3 s.h.

This course is a requirement for students in athletic training. It deals primarily with the administrative competencies necessary to accomplish the successful day-to-day operation of an athletic training program and facility. **Prereq.:** MAT 6900, MAT 6910.

MAT 6936 Head and Spine Evaluation and Management 3 s.h.

This course will provide students with a comprehensive and evidencebased approach to the evaluation and clinical diagnosis of head and spine musculoskeletal injuries and illnesses related to pathophysiological and epidemiological factors. Students will learn process for establishing a plan of care, therapeutic interventions and referral necessary for conditions associated with the spine, thorax, and head conditions. **Prereg.**: Successful Completion of Spring 1 Courses.

MAT 6937 Athletic Training Healthcare Administration 3 s.h.

This course is designed to examine and understand the issues and topics related to the administration of a professional athletic training healthcare practice. Students will gain an understanding of professional leadership, advocacy, models of healthcare, and systems of quality assessment and improvement.

Prereq.: Successful Completion of Summer 2 Courses.

MAT 6938 Clinical Practice 3 2 s.h.

This course will provide students an integrative experience focused on hands on clinical practice. Skills and knowledge learned in the Year 1 Spring courses will be applied during clinical experiences and through simulated opportunities. This course will be completed during an immersive clinical experience and simulated activities.

Prereq.: Successful Completion of Spring 1 Courses.

MAT 6940 Therapeutic Exercise 4 s.h.

A study of the indications, contraindications, physiological effects, special programs, and resistance methods that are used in the prevention and rehabilitation of athletic injuries. The focus of this course is to develop the cognitive competencies necessary for the safe, effective, and evidenced-based application of therapeutic rehabilitation techniques in a physically active patient population.

Prereq.: MAT 6920.

MAT 6945 General Medical Conditions 3 s.h.

Many conditions that beset athletes, performers, and other patients and not musculoskeletal in nature. The athletic trainer must be cognizant of these - and well versed in their diagnosis and management - in order to be fully equipped to administer proper and comprehensive healthcare. **Prereq.:** MAT 6901.

MAT 6946 General Medical Conditions Evaluation and Management 3 s.h. This course will provide students with a comprehensive and evidencebased approach to the evaluation and clinical diagnosis of general medical conditions related to pathophysiological and epidemiological factors. Students will learn process for establishing a plan of care, pharmacology and pharmacological interventions and referral necessary for conditions associated with the general medical healthcare.

Prereq.: Successful completion of Summer 1 Courses.

MAT 6947 Capstone Research Project 2 2 s.h.

This course will allow the students to further progress the research project started in Capstone 1 to completion. Students will collect and analyze data associated with the project. Upon completion of the research project students will present the findings of their authentic research project. Completion and presentation of the project is required for graduation from the program. **Prereq.:** Successful completion of MAT 6937, MAT 6936, MAT 6938.

MAT 6948 Clinical Practice 4 2 s.h.

This course will provide students an integrative experience focused on hands on clinical practice. Skills and knowledge learned in the Year 1 Spring and Year 2 Summer courses will be applied during clinical experiences and through simulated opportunities.

Prereq.: Successful completion of Summer 2 Courses.

MAT 6949 Advanced Medical Procedures 2 s.h.

This course will allow students to gain knowledge and skills for advanced medical procedures used in athletic training practice. Students will apply knowledge learned in simulated and hands on experiences. **Prereq.:** Successful completion of Summer 2 Courses.

MAT 6950 Evidence-Based Practice/Research 3 s.h.

This course will introduce students to the importance of research in the healthcare field. Students will learn the skills necessary to critically appraise literature and how to apply it in the form of best practices in athletic training healthcare. Concepts related to effectively searching databases, research clinical question writing, and interpreting the validity and reliability of research findings will be included throughout the course. The course will lay the foundational understanding of conducting research that will be utilized during the capstone research project.

Prereq.: Successful Completion of Fall 1 Courses.

MAT 6955 Performance and Health in Sports Medicine 2 s.h.

This course introduces athletic training students how physical activity and nutrients may influence athletic performance and general health. Behavioral change theories as well as knowledge in referrals to other healthcare practitioners will also be discussed.

MAT 6960 Clinical Practicum 3 2 s.h.

Involves both a clinical education experience which provides for integration of athletic training psychomotor, cognitive, and affective skills, and clinical proficiencies; and field experiences providing informal learning and practice and application of clinical proficiencies in a clinical environment under the supervision of an approved instructor.

Prereq.: MAT 6930.

MAT 6970 Pharmacology 3 s.h.

This course serves as an introduction to pharmacology for students pursuing careers in Athletic Training. The molecular world of pharmaceutical processes and cellular biochemical determinants of therapeutic interventions will be explored. An understanding of the fundamental principles of therapies for various conditions will be discussed. Constraints placed on athletes in the performance environment, and correct protocols with medication management for athletes will be discussed. **Prereq.:** MAT 6945, MAT 6950.

MAT 6972 Radiology for Athletic Trainers 1 s.h.

Further, this course will prepare athletic training students how to communicate with physicians verbally and through written correspondence. **Prereq.:** MAT 6915, MAT 6925.

MAT 6975 Advanced Seminar 3 s.h.

This course is designed to explore the identification and treatment of athletic injuries. The information and skills are intended for those students with relatively high level of sophistication in sports medicine. This course is a writing intensive and research orientated upper division course. **Prereq.:** MAT 6935, MAT 6950.

MAT 6976 Comprehensive Approach to Healthcare 2 s.h.

This course addresses and examines concepts related to psychological and behavioral health concerns typically encountered in athletic training healthcare. Students will also investigate content and concepts related to but not limited to social determinants of health, cultural competency and other issues in athletic training clinical practice.

Prereq.: Successful Completion of Fall 2 Courses.

MAT 6977 Athletic Training Healthcare Seminar 3 s.h.

This course is designed to provide students with the knowledge and skills necessary for transition to professional practice. The course will evaluate current topics seen in athletic training healthcare. During the course students will be provide with techniques and mentoring to be successful in the certification process, certification maintenance, licensure, and other skills needed for professional athletic trainers.

Prereq.: Successful completion of Fall 2 Courses.

MAT 6978 Clinical Practice 5 4 s.h.

This course will provide students an integrative experience focused on hands on clinical practice. Skills and knowledge learned in the Year 2 Fall and Year 2 Spring (7-week) courses will be applied during clinical experiences and through simulated opportunities. This course will be completed during an immersive clinical experience.

Prereq.: Successful completion of Fall 2 Courses.

MAT 6980 Clinical Practicum 4 1 s.h.

Involves both a clinical education experience which provides for integration of athletic training psychomotor, cognitive, and affective skills, and clinical proficiencies; and field experiences providing informal learning and practice and application of clinical proficiencies in a clinical environment under the supervision for an approved instructor. Athletic training students are required to be involved in clinical education and field experiences in order to gain entrylevel proficiencies in the profession. **Prereq.:** MAT 6960.

MAT 6985 Capstone Project 1 2 s.h.

This course will develop skills and a knowledge base that will aid the student while conducting and critically reviewing research in athletic training. Coursework will address the design of research in athletic training. The importance of pursuing quality research in athletic training will be stressed and the procedures necessary to complete this process will be presented. **Prereq.:** MAT 6930 and MAT 6935.

MAT 6988 Clinical Practicum 5 2 s.h.

Athletic Training students will continue to practice and hone their clinical skills in pharmacology, manual medicine, and radiology in the sports medicine field. Students will learn and identify these skills through direct immersion in the clinical environment. Students will work with a preceptor directly for this course. The purpose of this course is to review and evaluate clinical proficiencies required by the National Athletic Trainers' Association for certification and our professional accreditation through CAATE.

MAT 6990 Capstone Project 2 2 s.h.

Coursework will focus on developing the skills needed to critically synthesize material with accepted practice, and prepare professional presentations using acquired data and an appropriate statistical analysis. The importance of pursuing quality research in athletic training will be stressed and the procedures necessary to complete this process will be presented. **Prereq.:** MAT 6950, MAT 6985.

MAT 6995 Clinical Practicum 6 2 s.h.

Athletic Training students will continue to practice and hone their clinical skills and knowledge as an entry-level athletic trainer. Students will learn and identify these skills through direct immersion in the clinical environment. Students will work with a preceptor directly for this course. The purpose of this course is to review and evaluate clinical proficiencies required by the National Athletic Trainers' Association for certification and our professional accreditation through CAATE.

MAT 6998 Acute Medical Emergency Procedures 2 s.h.

This course is designed to make the athletic training student aware of common medical procedures that they may see in their medical practice as an athletic trainer, and prepare them to act in the event that there is an on-field emergency or absence of emergency medical services.

Master of Business Administration Program Director

Dr. Patrick J. Bateman

3354 Williamson Hall (330) 941-3524 pjbateman@ysu.edu

M.B.A. Coordinator

Monique Bradford 3331 Williamson Hall (330) 941-3069 mrbradford@ysu.edu

Program Description

The Master of Business Administration program is designed to prepare

individuals for increasing levels of managerial and leadership responsibilities. The program helps qualified individuals to develop their understanding of decision making, management, leadership, and business strategy & policy concepts, and how to apply these concepts across a variety of business contexts.

The program is delivered in a fully online format (https://online.ysu.edu/ degrees/business/mba/).

Accreditation

The Master of Business Administration program is fully accredited by the Association to Advance Collegiate Schools of Business (AACSB) International. Fewer than one-third of the 1,200 business schools in the United States have earned this prestigious accreditation.

Admission Requirements

The MBA Program offers applicants multiple pathways to admission, many of which do not require a standardized test score and/or full-time professional work experience.

Regular Admission, applicants must meet the criteria of one of the following admission pathways:

- Earned an undergraduate degree in business, economics, or S.T.E.M. ^[3] with a 3.0+ GPA. No full-time professional work experience or standardized test score required.
- Earned an undergraduate degree in a discipline other than business, economics, or S.T.E.M ^[3] with a 2.7+ GPA <u>and</u> a minimum of 2 years fulltime professional work experience ^[1]. No standardized test score required.
- 3. Earned an undergraduate degree from an accredited university with a 2.7+ GPA and earned 9 credits from graduate-level coursework from an accredited university with a 3.0+ GPA.
- 4. Earned a graduate or terminal degree (e.g., PhD, MD, or JD) in any field. No work experience or standardized test required.
- 5. Earned an active professional certification ^[2]. No work experience or standardized test score required.
- 6. Satisfy the requirements of the Performance-based Admission Pathway $\rm (PAP)^{[4]}.$

Provisional Admission, applicants must meet the criteria of one of the following three admission pathways:

- Earned an undergraduate degree (in any field) from an accredited university with a 2.70 to 2.99 GPA and a GMAT (or GRE equivalent) score of 450. No work experience required.
- 2. Earned an undergraduate degree (in any field) from an accredited university with a 2.5 2.7 GPA and a minimum of 5 years of full-time professional work experience. ^[1] No standardized test score option.
- 3. Earned an undergraduate degree (in any field) from an accredited university with a 2.5 to 2.69 GPA <u>and</u> earned 9 credits from graduate-level coursework from an accredited university with a 3.0+ GPA.

^[1] Professional/managerial experience is determined using an applicant's chronological resume and any requested supporting documents. Professional/managerial experience is not simply a count of the years of employment, but strongly considers the relevance of the full-time experience as it relates to the nature of the program. This is typically demonstrated through a history of full-time positions where an applicant has documentable experience of overseeing people, projects, operations, and/or customer accounts. For strong applicants, the work experience qualification is supported by a career progression evidenced by increased roles, responsibilities, accomplishments and/or formal promotions. *Please note:* the chronological resume should not include non-professional positions, part-time (i.e., less than 40 hours per week) professional positions, volunteerism, or internships. These types of work are not considered in assessing the professional/managerial experience criteria.

[2] List of professional certifications (in alphabetical order): CFA (Charted Financial Analyst), CFP (Certified Financial Planner), CMA (Certified Management Accountant), CPA (Certified Public Accountant), CPIM (Certified in Planning and Inventory Management), CSCP (Certified Supply Chain Professional), CSM (Certified ScrumMaster), Lean Black Belt (certified by IISE), Lean Six Sigma Black Belt (certified by IISE), PHR (Professional in Human Resources, certified by HR Institute), PMI PMP (PMI Project Manager Professional), SHRM–CP (SHRM Certified Professional), SHRM–SCP (SHRM Senior Certified Professional in Human Resources, certified by HR Institute), Six Sigma Black Belt (certified by either ASQ or IISE).

^[3] S.T.E.M. is an acronym that refers to teaching and learning in the fields of science, technology, engineering, and mathematics. For a complete list of specific degree programs that meet the S.T.E.M criteria, refer to the DHS STEM Designated Degree Program List (https://www.ice.gov/doclib/sevis/ pdf/stemList2023.pdf). *If a specific degree program (the CIP Code Title) is not included in this list, the degree program does not meet the S.T.E.M admission criteria.*

^[4] Performance-based Admission Pathway (PAP). For those applicants who do not meet any of the other admission pathways, the PAP provides an opportunity for applicants to be accepted to the OMBA program after demonstrating their readiness by completing three graduate-level courses required for the Leadership Certificate. To qualify for admission to the OMBA program through the Performance-based Admission Pathway (PAP), the three required courses in the Leadership Certificate must be completed with a cumulative GPA of 3.0 or higher. Additionally, students must earn a grade of B or better in at least two of the three courses and no grade of D or F in any course. If meeting these requirements, an applicant would be accepted into the OMBA program, upon formal application to the program.

Graduate Faculty

Patrick J. Bateman, Ph.D., Professor

Social media; privacy and publicness on the Internet; E-commerce; online communities; social and immersive computing environments (e.g., virtual worlds); computer mediated communication; business use of information systems

Huaiyu (Peter) Chen, Ph.D., Associate Professor Equity market; abnormal return

Jeong Hoon Choi, Ph.D., Associate Professor

Miri Chung, Ph.D., Assistant Professor

Ramesh Dangol, Ph.D., Professor Strategic management; dynamic capabilities; entrepreneurial opportunity recognition; firm failures

Rangamohan V. Eunni, D.B.A., Professor Strategic management; international strategy; emerging markets

Kendra Fowler, Ph.D., Professor Services marketing; retailing

Guohong (Helen) Han-Haas, Ph.D., Professor Leadership and diversity; employee attitudes and team development; social network and multilevel studies

Jessi Hinz, Ph.D., Assistant Professor

Bruce Keillor, Ph.D., Professor, Chair Marketing strategy; firm-level political strategy; cross-cultural marketing

Karin A. Petruska, Ph.D., Professor Financial accounting and reporting; international accounting; earnings quality and disclosure; analyst following; forensic accounting

Christina Saenger, Ph.D., Associate Professor Consumer behavior; social media; identity; branding

Jeremy T. Schwartz, Ph.D., Associate Professor, Director Practice-based case studies; public pensions

Doori Song, Ph.D., Associate Professor Advertising effect; consumer motivation; information processing; emerging

Ying Wang, Ph.D., Professor Integrated marketing communication; brand communication; international marketing; e-marketing

Rongyao (Gloria) Zhang, Ph.D., Assistant Professor

The MBA program is delivered in two modalities of delivery: 100% online and flex-campus (admission is on hiatus for the 2023-2024 academic year). Regardless of the modality of delivery, the program is designed to prepare individuals for increasing levels of managerial and leadership responsibilities.

The 30-credit hour degree is achieved by successfully completing:

100% Online

media

- 1. the MBA core (8 courses, 24 credit hours), and
- 2. a specialization (2 specific courses, 6 credit hours total) OR the General option (any 2 courses from the list, 6 credit hours total)

COURSE	TITLE S.H.		
MBA Core (24 credits)			
OMBA 6900	Special Topics	3	
or OMBA 6921	Industrial Economics		
OMBA 6922	Cost Based Decision Making	3	
OMBA 6923	Corporate Financial Management	3	
OMBA 6940	Leadership	3	
OMBA 6941	Managing Organizational Talent	3	
OMBA 6944	Operations & Supply Chain Management	3	
OMBA 6955	Marketing Strategy	3	
OMBA 6975 Business Policy and Strategy		3	
SPECIALIZATION (selected)	DR GENERAL (6 credits total, only one option can be	6	
Healthcare Manag	ement (specialization)		
OMBA 6962	Health Care Reform		
OMBA 6992 Health and Human Services Planning and Fiscal Management			
OR			
Human Resources	(specialization)		
OMBA 6943	Developing and Leading High Performing Teams		
OMBA 6971	Strategic Human Resource Management		
OR			
Marketing (special	ization)		

OMBA 6954	Digital Marketing
OR	
Organizational Lea	adership (specialization)
OMBA 6942	Essentials of Leadership Coaching
OMBA 6943	Developing and Leading High Performing Teams
OR	
General	
5	al requirements, students must complete any two ng six (6) credits of coursework, from this list:
OMBA 6942	Essentials of Leadership Coaching
or OMBA 69	4Developing and Leading High Performing Teams
or OMBA 69	$5 {f x}$ onsumers in a Digital World
or OMBA 69	5Ðigital Marketing
or OMBA 69	7 Strategic Human Resource Management
or OMBA 69	62Health Care Reform
or OMBA 69	92Health and Human Services Planning and Fiscal Management
Gradate-level tr	ransfer credit is also accepted, but not automatic.

Students must request the approval of transfer credit, which requires submission of course syllabi for evaluation, the course it equates to in the program and/or a description of how the course transfer credit is being requested aligns with the student's carreer/learning goals.).

On an extremely limited basis, students may complete other PRE-APPROVED, GRADUATE LEVEL coursework. Students must request approval from the MBA Program prior to registering for the course.

Total Semester Hours

FLEX-CAMPUS (HYBRID) (Applications to this option are currently on hiatus.)

30

1. the MBA core, and

2. a required specialization in Leadership.

Course List

COURSE	TITLE	S.H.
MBA Core		
OMBA 6900	Special Topics	3
ACCT 6922	Cost Based Decision Making	3
FIN 6923	Corporate Financial Management	3
MGT 6944	Managing Business Processes	
MGT 6947	Managing Information & Technology	
MGT 6948	Project Management	
MKTG 6975	Applied Marketing Strategy	
MGT 6975	Strategic Management	
LEADERSHIP SPECIALIZATION (REQUIRED)		
MGT 6930	Managing and Leading in Organizations	3
MGT 6941 Managing Organizational Talent		3
Total Semester Hours		30

Learning Outcomes

The Williamson MBA prepares our graduates to be successful:

- Managers, knowledgeable of core business processes, issues, and environments.
- · Decision Makers, equipped to make information-based business decisions.
- Strategic Thinkers, able to evaluate complex business situations.
- Leaders, versed in techniques for motivating and influencing others to achieve business goals.

OMBA 6953	Consumers in a Digital World
UNDA 0900	

Graduate Courses

OMBA 6900 Special Topics 3 s.h.

Special topics and new developments in business. Subject matter to be announced in advance of each offering.

Prereq.: As announced or permission of instructor.

OMBA 6921 Industrial Economics 3 s.h.

Students will learn to analyze and understand the impact economic factors (e.g., information, consumer behavior, supply and demand) have on shaping markets and industries. Using this knowledge, students will be capable of assessing the different types of economic strategies (e.g., product differentiation, pricing, advertising and signaling) an organization can employ to gain market power to realize economic profits.

Prereq.: graduate standing, admission to the OMBA Program or permission from the MBA Program.

OMBA 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.

Prereq.: graduate standing, admission to the OMBA Program or permission from the MBA Program.

OMBA 6923 Corporate Financial Management 3 s.h.

Participants will gain an understanding of financial analysis techniques 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, admission to the OMBA Program or permission from the MBA Program.

OMBA 6940 Leadership 3 s.h.

The purpose of this course is for you to acquire theoretical and practical knowledge about management and leadership so that you can lead and follow more effectively and ethically. It explores management and leadership situations with the intent to extract lessons and insights which can be applied to your own approaches to managing, leadership, and followership. **Prereq.:** graduate standing, admission to the OMBA Program or the Certificate in Organizational Leadership or permission from the MBA Program.

OMBA 6941 Managing Organizational Talent 3 s.h.

The objective of this course is to provide students with an overview of the organizational behavior literature, research findings, and applications. Students are expected to think about, discuss, debate, analyze, and solve issues relating to organizational behavior. Students will be exposed to a broad range of management theories and expected to apply those theories to a variety of organizational contexts and situations.

Prereq.: graduate standing, admission to the OMBA Program or the Certificate in Organizational Leadership or permission from the MBA Program.

OMBA 6942 Essentials of Leadership Coaching 3 s.h.

Coaching and leadership are essential skills for any professional who wants to realize their potential and unlock the full potential of others. Organizations need leaders who can guide employees, foster collaboration, and drive results. Leaders who use coaching techniques build positive relationships, instill empowerment, and enhance the motivation and engagement of others to create lasting change. This course will help participants develop a solid foundation of coaching and leadership competencies, which will enable them to excel as a colleague, manager, and leader. The course is valuable for any professional looking to create a better understanding of themselves, help others to develop and grow, and become an even more valuable asset to their organization.

Prereq.: graduate standing, admission to the OMBA Program or the Certificate in Organizational Leadership or permission from the MBA Program.

OMBA 6943 Developing and Leading High Performing Teams 3 s.h.

The success of professionals in any organizational context is reliant on their ability to harness the power of teams. Essential to this type of success is one's knowledge, skills, and ability to develop and lead teams to be more productive, efficient, and effective. In this course participants will learn the characteristics of high-performing teams, various tools that foster collaboration, communication, and trust among team members, and techniques to handle common challenges and conflicts that arise in teams. **Prereq.:** graduate standing, admission to the OMBA Program or permission from the MBA Program.

OMBA 6944 Operations & Supply Chain Management 3 s.h.

Operations and Supply Chain Management (OSCM) examines the functions of sourcing, materials management, operations planning, distribution, logistics, retail, demand forecasting, order fulfillment, and more in a broad area that covers both manufacturing and service industries. In this course, students will learn what functions OSCM performs, why it is important, and how to make business decisions in the field of OSCM. The objective is to help students develop a systematic working knowledge of the concepts and methods related to designing and managing operations in a supply chain. **Prereq.**: graduate standing, admission to the OMBA Program or permission from the MBA Program.

OMBA 6947 Managing Information and Technology 3 s.h.

No matter the industry, nor department within a company – information and technology play a key part in an organizations ability to implement its strategy. In this course you will obtain knowledge that will help you not only to better understand, but be able to more effectively select, implement, and manage these resources within your organization.

Prereq.: graduate standing, admission to the OMBA Program or permission from the MBA Program.

OMBA 6948 Project Management 3 s.h.

Project Management deals with seeking new methods of planning, organizing, and controlling non-routine tasks. You will develop an understanding of the role of a Project Manager in an organization, the tools and techniques to successfully manage projects, and how to deal with problems often faced when managing projects. The concepts learned can also help prepare you for taking the PMP (Project Management Professional) or CAPM (Certified Associate in Project Management) certification exams.

Prereq.: graduate standing, admission to the OMBA Program or permission from the MBA Program.

OMBA 6953 Consumers in a Digital World 3 s.h.

An examination of consumers and consumer behavior in a digital world. Students study the consumer decision making process that individuals or businesses engage in during the evaluation, acquisition, use of, and disposition of goods and services. Emphasis is placed on the role that technology plays in developing actionable plans to address consumers' wants and needs of today and anticipate those of tomorrow.

Prereq.: graduate standing, admission to the OMBA Program or permission from the MBA Program.

OMBA 6954 Digital Marketing 3 s.h.

In-depth investigation into the development and evaluation of interactive and digital marketing strategies and tactics.

Prereq.: graduate standing, admission to the OMBA Program or permission from the MBA Program.

OMBA 6955 Marketing Strategy 3 s.h.

Students explore the development of marketing strategy via segmentation, targeting, and positioning, and the support of the marketing strategy through integrated product, price, place, and promotional tactics.

Prereq.: graduate standing, admission to the OMBA Program or permission from the MBA Program.

OMBA 6962 Health Care Reform 3 s.h.

The purpose of the course is to give students the skills necessary to understand all aspects of health and health care especially those related to Health Care Reform and recent and previous legislation. It will examine the supply of and demand for health services, and the analysis of health care systems and current, previous and potential future legislation relevant to health care reforms.

Prereq.: graduate standing, admission to the OMBA Program or MHHS Program or ELHH-DD Program or permission from the OMBA Program. **Cross-Listed:**HHS 6962.

OMBA 6971 Strategic Human Resource Management 3 s.h.

In today's dynamic and competitive environment, human resources are not simply an expense, but a source of competitive advantage and value creation. For this reason, Human Resources has become a critical strategic partner responsible for attracting, retaining, and managing an organization's most valuable assets – its people. In this course, participants will examine human resource management from a strategic perspective, enabling them to ensure that HR practices are aligned with organizational goals and strategies. The course is suitable for any manager who want to enhance their understanding of strategic human resource management, as well as human resources professionals who want to update their knowledge of best practices in the field.

Prereq.: graduate standing, admission to the OMBA Program or permission from the MBA Program.

OMBA 6975 Business Policy and Strategy 3 s.h.

Strategy involves thinking at the enterprise level. Successful strategy design and implementation requires a holistic understanding of the threats and opportunities in the firm's external environment, and of its internal resources and capabilities. It also requires a synthetic view on how the firm integrates functional activities and cross-functional business processes. This course is designed to develop such an integrative view of the firm and its environment, along with appropriate analytical skills.

Prereq.: OMBA 6923, OMBA 6944, graduate standing, and admission to the OMBA Program or permission from the MBA Program.

OMBA 6992 Health and Human Services Planning and Fiscal Management 3 s.h.

This course examines the principles of strategic planning and fiscal management in relation to Health and Human Services Organizations. Emphasis is placed on the specific role of the program director in leading and managing an organization in collaborative efforts and community planning. The course prepares the student to analyze the impact of fiscal management on resource allocation, personnel management, decision making, and future planning through the development of an individualized strategic plan. **Prereq.:** graduate standing, admission to the OMBA Program or MHHS Program or ELHH-DD Program or permission from the OMBA Program.

OMBA 6996 Independent Study 3 s.h.

Special independent study and/or research in any area of business conducted by the student under the supervision of a graduate faculty member. Credit will be determined in each case based upon the nature and scope of the independent study project. Approval of faculty and program is required prior to registering.

Prereq.: graduate standing, admission to the OMBA Program, and permission from the MBA Program.

Master of Computing and Information Systems

Program Director

Dr. Feng George Yu 316 Meshel Hall (330) 941-1775 fyu@ysu.edu

Academic Advisor

Janeetsa Ortiz 2300 Meshel Hall (330) 941-2418 jmortiz@ysu.edu

Program Description

The Master of Computing and Information Systems is designed to emphasize important applied areas of computing, providing background in the overall structure of information systems, in-depth knowledge in vital areas, such as databases and networking, and opportunities to learn a variety of other important, emergent, and current areas of computing, such as web design, application development, and computer security.

The program serves students with some background in computing (possibly work related) who need additional deeper, more comprehensive, or more upto-date knowledge of computing and information systems in order to find ITrelated jobs, to make career advancements, or to better utilize the knowledge gained in work environment to solve work-related tasks on a daily basis.

The program is interdisciplinary in nature to allow students, with a background in areas other than information systems, to learn how to apply information systems fundamentals to those areas. Therefore, the program also supports a significant number of interdisciplinary courses, which allows students to take elective courses outside of the department.

Admission Requirements

In addition to the minimum College of Graduate Studies admission requirements, students must also have previous courses in or the equivalent of:

COURSE	TITLE	S.H.
MATH 1571	Calculus 1 (or equivalent calculus courses)	4
CSIS 3722	Development of Databases (or equivalent of databases courses)	3
CSIS 3723	Networking Concepts and Administration (or equivalent of networking courses)	3
or CSIS 3782	Cisco Networking Academy 1	

Equivalent employment-related experience may be substituted for some of these requirements.

Students are also required to submit a résumé, a written statement describing their past experience in computing/information systems (both employment and academic), and their reasons and goals for applying to the program.

Graduate Faculty

Abdu Arslanyilmaz, Ph.D., Professor, Director Computer-based learning design; hazard detection in traffic simulation; computer-based and case-based learning

Alina Lazar, Ph.D., Professor

Applied machine learning; database mining; agent-based simulations, and parallel programming

John R. Sullins, Ph.D., Associate Professor Artificial intelligence; game design; neural networks and expert systems

Feng Yu, Ph.D., Associate Professor NoSQL databases; big data systems; cloud computing

Degree Requirements

A minimum of 30 approved semester hours of credit (at least half of which must be at the 6900 level) is required for the Master of Computing and Information Systems.

Thesis Option

COURSE	TITLE S	
Core		
At least half of the	e semester hours must be at the 6900 level	
CSCI 6901	Principles of Computer Programming	3
CSCI 6920	Theory and Practice of Information Systems	3
CSCI 6950	Advanced Database Design and Administration	3
CSCI 6997	Seminar in Computer and Information Systems (take in the first semester if possible but no later than the second semester)	
Select one of the following:		3
CSCI 5801	Software Engineering	
CSIS 5828	Computer Network Security	
CSCI 6951	Data Science and Machine Learning	
Electives		
Select a minimum of 12 s.h. of electives consisting of approved graduate 1		

and/or swing courses. Up to 9 s.h. may be taken in departments other than Computer Science and Information Systems.

Thesis

CSCI 6999	Thesis	5
Total Semester Hours		30

Non-Thesis Option

COURSE	TITLE			
Core				
At least half of the	e semester hours must be at the 6900 level			
CSCI 6901	Principles of Computer Programming	3		
CSCI 6920	Theory and Practice of Information Systems	3		
CSCI 6950	Advanced Database Design and Administration	3		
CSCI 6997	Seminar in Computer and Information Systems (take in the first semester if possible but no later than the second semester)	1		
CSCI 6993	Computing and Information Systems Graduate Internship			
Select one of the following:		3		
CSCI 5801	Software Engineering			
CSIS 5828	Computer Network Security			
CSCI 6951	Data Science and Machine Learning			
Electives				
Select a minimum of 12 s.h. of electives consisting of approved graduate 12 and/or swing courses. Up to 9 s.h. may be taken in departments other				

than Computer Science and Information Systems.

Capstone Project

This project is meant to explore and apply some area of computing and
information systems and is subject to the approval of the major advisor.CSCI 6991Data Engineering Capstone

Total Semester Hours

Advanced Standing

Admission Requirements

In addition to the minimum College of Graduate Studies admission requirements, students must also have previous courses in or the equivalent of:

COURSE	TITLE	S.H.
MATH 1571	Calculus 1	4
CSIS 3722	Development of Databases	3
CSIS 3723	Networking Concepts and Administration	3

or	
CSIS 3782	Cisco Networking Academy 1

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For CS: Highly qualified undergraduate students can apply for admission into the combined "4+1" Bachelors/Masters program for the MC&IS in Computer Science.

Request admission into the program after completing 80-85 s.h. from the MC&IS Graduate Coordinator, Alina Lazar, 308 Meshel Hall, (330) 941-3468.

For IT: Highly qualified undergraduate students can apply for admission into the combined "4+1" Bachelors/Masters program for the MC&IS in Information Technology.

Request admission into the program anytime during your undergraduate degree from the MC&IS Graduate Coordinator, Alina Lazar, 308 Meshel Hall, (330) 941-3468.

Learning Outcomes

The Master of Computing and Information systems program provides preparation for students to

- design a large-scale information system to meet the goals of an organization, encompassing software, databases, networks, and people.
- analyze the design, implementation, and maintenance of databases within a large organization.
- compile knowledge in crucial are as of information systems, such as data mining, advanced network design , and project management.
- design components and evaluate decisions related to information systems that interact with the outside world, including networking, security, and client-server web design
- design, and implement a significant component of a large-scale information system

Graduate Courses

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.: CSIS 3701 or graduate standing.

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, static analysis tools, dynamic analysis tools, and design patterns. Students gain experience in multiple environments (Windows and a UNIX-based environment).

Prereq.: Junior standing and CSIS 3700 or CSCI 6901.

CSCI 5806 Operating Systems 3 s.h.

3

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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.:** CSIS 3700 and CSIS 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.:** CSIS 3700 and CSIS 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.: CSIS 3700 and CSIS 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 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. Al systems

and languages. Prereq.: CSIS 3700 or CSIS 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 5849 Computational Methods for problems in the Physical Sciences 3 s.h.

CSCI 5849: Computational Methods for the Physical Sciences 3 s.h. Provides application of the techniques discussed in the class to real world situations. Cross-Listed: MATH 5849 and PHYS 5849.

CSCI 5849: Computational Methods for the Physical Sciences 3 s.h. **Prereq.:** MATH 3705 and PHYS 2610.

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 5858 Blockchain and Cryptocurrency Technologies 3 s.h.

This course introduces the fundamentals and mechanics of blockchain and cryptocurrency. Topics include an introduction to basic cryptography and cryptocurrencies, decentralization and mechanism of bitcoin, storage and transactions of bitcoin, mining of bitcoin, and regulation, platforms, and applications of bitcoin.

Prereq.: Senior standing or graduate student status.

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.:** CSIS 3700 and CSCI 3710 or graduate standing.

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.

CSCI 6901 Principles of Computer Programming 3 s.h.

Significant features of several computer programming languages to fit the needs of graduate students with no previous computer science experience. Programming techniques and problem analysis. Students will do programming projects appropriate for their needs.

CSCI 6905 Information Structures 3 s.h.

Basic concepts of information: modeling structures, machine level implementation, storage management, programming, language implementation, run-time structures, sorting, and searching. **Prereq.:** CSCI 3710 and CSIS 3740, or permission of chair.

CSCI 6920 Theory and Practice of Information Systems 3 s.h.

A study of the relationship of information systems to individuals, organizations, and society. A detailed study of the principles, methodologies, and issues associated with designing, implementing, and administering information systems as a resource in a networked, data-driven organization.

CSCI 6930 Formal Languages and Syntactic Analysis 3 s.h.

Study of formal languages, especially context-free languages, and their applications to parsing and syntactic analysis. **Prereq.:** CSCI 3710 or CSCI 6905.

CSCI 6940 Advanced Network Design and Administration 3 s.h.

Advanced network design, implementation, and administration. Topics include infrastructure and architecture, VLSM, logical and physical designs, security issues, voice over IP, client/server networks, and VLANs. **Prereq.:** CSIS 3723 or CSIS 3783.

CSCI 6950 Advanced Database Design and Administration 3 s.h.

Advanced concepts in database design, development, and administration. Database query languages, transactions, and data warehousing. Relational calculus. System analysis; concurrency; backup and recovery, and security issues; advanced models, including distributed, object-oriented, and online databases.

Prereq.: graduate standing.

CSCI 6951 Data Science and Machine Learning 3 s.h.

Basic methodologies for the data science pipeline: data acquisition and cleaning, handling missing data, exploratory data analysis, visualization, feature engineering, modeling, interpretation, and presentation in the context of real-world datasets. Classical models and techniques for classification, clustering, anomaly detection, deep learning, and collaborative filtering. **Cross-Listed:** CSCI 4851.

CSCI 6952 Deep Learning 3 s.h.

Foundations of neural networks and deep learning. Master the practical aspects of implementing deep learning solutions, using a hands-on approach to understanding both theory and practice. Key architectures in deep learning are covered, including feedforward networks, convolution neural networks, recurrent neural networks, long short-term memory networks, autoencoders and generative adversarial networks. Apply deep learning to real world problems.

Cross-Listed: CSCI 4852.

CSCI 6955 Transformers: Large Language and Vision Models 3 s.h.

A comprehensive course about Transformer-based models. This course covers the inner workings of large language models such as GPT and BERT, and vision transformers such as ViT. Learn their architectures, applications, and how they revolutionize AI in language understanding and image processing. Handson projects and case studies will deepen your practical knowledge of these cutting-edge technologies. Cross-Listed: CSCI 4855.

CSCI 6961 Client-Side Web Development and Programming 3 s.h. Design and development of interactive, multimedia webpages. Effective uses of forms, graphics, and animation. Client-side programming tools, such as dynamic HTML, document object model, and JavaScript for graphics and form validation. Storyboarding techniques and user interface design principles. **Prereq.:** CSIS 2617 or CSCI 6901.

CSCI 6962 Server-Side Web Development and Programming 3 s.h.

Configuration of web server software and the use of server-side programming. Server-side scripting in languages such as PHP and JavaServer Pages. Database access and drivers. Security issues, including access control and secured transmissions.

Prereq.: CSCI 6901 and graduate standing.

CSCI 6970 Biometrics 3 s.h.

Biometrics is an emerging and fast growing field that has found applications in a wide range of areas. This course will introduce major biometric techniques (face, fingerprint, voice and iris), focusing on the methods that have roots in computer vision, image processing, pattern recognition and machine learning. The course is designed to be project oriented. Student can choose a topic and develop it into a full project. Students who are interested in writing C++ codes and doing tests with OpenCV libraries are particularly encouraged to do so. **Prereq.:** graduate standing.

CSCI 6971 Cloud Computing and Big Data 3 s.h.

The objective of this course is to provide an introduction of cloud computing and big data, including the background knowledge and embracing technologies. This course addresses the latest advances in hardware and software, cluster architecture, programming paradigms that emphasize in system performance, scalability, security, and energy efficiency. We also include hands-on experiences for students to practice on building, managing, and programming on contemporary cloud and big data systems. Research directions in cloud and big data will be introduced for graduate level study. **Prereq.:** CSCI 6901 or graduate standing.

CSCI 6990 Computer Science Project 1-3 s.h.

Report and discussion of individual topics or research projects in computer science.

Prereq.: Nine semester hours of computer science courses numbered above 5000.

CSCI 6991 Data Engineering Capstone 3 s.h.

This capstone project is designed so students in the MCIS program get the chance to apply and demonstrate their skills and knowledge in SQL, NoSQL, RDBMS, Bash, Python, ETL, Data Warehousing, Machine and Deep Learning, BI tools, Big Data, Cloud and Distributed Computing, Networking and Security and Software Engineering. To be taken during the last semester of studies. **Prereq.:** Nine semester hours of computer science courses numbered above 5000 and graduate standing.

CSCI 6993 Computing and Information Systems Graduate Internship 1-3 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 graduate internship supervisor.

Prereq.: CSCI 6920 and permission of graduate internship supervisor.

CSCI 6995 Special Topics in Computer Science 1-4 s.h.

Special topics in computer science selected by the staff. **Prereq.:** Permission of chair.

CSCI 6996 Independent Study 1-4 s.h.

Study under the supervision of a faculty member. **Prereq.:** Permission of chair.

CSCI 6997 Seminar in Computer and Information Systems 1 s.h.

Overview of research methods and presentation techniques (written and oral) for advanced work in computer science and information systems. Will include presentations of current student/faculty research. Students will be required to deliver at least one conference-style presentation of their own in an area related to their research.

CSCI 6999 Thesis 3-6 s.h.

A student may register for six semester hours in one semester or for three semester hours in each of two semesters.

CSIS 5824 Applied Artificial Intelligence 3 s.h.

Study 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 5825 Natural Language Processing 3 s.h.

This course will explore the field of NLP (Natural Language Processing) as it is concerned with the theory and practice of modern AI. It covers major concepts of NLP. It presents important algorithms, methods, structures, and techniques required to construct natural language interfaces for software agents and physical agents. It introduces students to important approaches necessary to build practical, useful, and interesting systems that require natural language processing, interfaces, and models.

Prereq.: CSCI 3710, CSCI 5835, CSCI 5870, or CSIS 5824.

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 or graduate standing.

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 3701 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 2605 or CSIS 2610 or CSIS 3737.

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.

CSIS 6902 Computing in Education 3 s.h.

The course covers methods for fostering an inclusive computing culture and designing inclusive learning environments within the field of computer science. It delves into various topics, including effective collaboration and communication surrounding computing concepts. Additionally, it focuses on the creation of inclusive, accessible computer science learning environments tailored for K-12 grade levels, emphasizing implementation and delivery while considering diversity and inclusivity.

Prereq.: Enrollment in Computer Science Endorsement Program.

CSIS 6903 Practicum & Portfolio 2 s.h.

Seminar related to the practicum for work-related experience in teaching CS. 50 hours of field experience in teaching computer science concepts. This can be completed in K-12 setting or in an introductory computer science course at a college or university.

Prereq.: Enrollment in the Computer Science Endorsement program.

Master of Education in Intervention Services

Introduction

Students who successfully complete 45 credit hours of coursework are awarded the Master of Education (M.Ed.) degree in Intervention Services. An additional 54 credit hours are required for the awarding of the Educational Specialist (Ed.S.) degree in School Psychology. Candidates must also pass the PRAXIS II examination in school psychology for licensure in the State of Ohio and for certification by the National Association of School Psychologists (NASP). (Please note the following are required for admission to the Educational Specialist degree: Successful completion of the YSU M.Ed. In Intervention Services, demonstration of successful skills as evidenced by grades and disposition ratings throughout the program, and a successful Ed.S. admissions interview.)

The program provides a curriculum that is comprehensive, integrated, and sequential. It follows the school psychology standards set forth by the State of Ohio, NASP, and the Council for the Accreditation of Education Preparation (CAEP). Courses reflect current advances in the field of school psychology and education. In addition, the program has a unique emphasis in low incidence disabilities. The program is committed to implementing and integrating the most current technology.

The school psychology program is structured so that course content is accompanied by appropriate field experiences. Practicum experiences are designed to provide students with opportunities to practice skills that are required in professional practice while under direct supervision. Practicum experiences occur in conjunction with specific courses and are individualized in terms of setting and assignment to a field supervisor.

Full-time study in school psychology (M.Ed and Ed.S.) generally constitutes a three-year sequence. To develop the needed specific competencies and to meet the training goals of the YSU school psychology program, candidates during the first year of study complete coursework in counseling, educational, and psychological foundations at the master's level. The first year includes 100 practicum hours and provides candidates with experiences related to a variety of low and high incidence disabilities. Upon successful completion of year one requirements, candidates will graduate with a Master of Education in Intervention Services.

For more information visit our Department website (http://catalog.ysu.edu/ undergraduate/colleges-programs/college-education/department-counselingspecial-education-school-psychology/).

Welcome

Our program is designed to prepare graduates with the necessary knowledge, skills, and dispositions to serve our community. Youngstown State University offers a Master of Education in Intervention Services as the initial degree required for admission to the Educational Specialist in School Psychology program. The School Psychology program at YSU enrolled its first class of candidates in 2012 and graduated its first class of School Psychologists in August 2015. This is the first new degree program in Ohio dedicated to the preparation of school psychologist in over four decades. Master's students will find a unique educational experience that prepares them for study in School Psychology. I encourage you to review the website and to contact the program director below.

Dr. Jeffrey Coldren Chair / Professor Department of Counseling, School Psychology, Educational Leadership and Psychology jtcoldren@ysu.edu

Program Director

For specific questions about the Master of Education in Intervention Services and the School Psychology program, please contact the program director.

Carrie R Jackson, Ed.D., Assistant Professor crjackson01@ysu.edu

Accreditation

The School Psychology program within the Department of Counseling, School Psychology, & Educational Leadership, achieved full national recognition as a NASP (National Association of School Psychologists) approved program through Fall 2024 - https://www.nasponline.org/

Admission Requirements

A set of specific criteria must be met before the applicant can be officially accepted as a candidate for a YSU graduate degree in school psychology. Undergraduate/graduate coursework, grade point average, relevant work experience, letters of recommendation and personal maturity are considerations for entrance into the program. To begin the application process, prospective candidates should contact Dr. Richard Van Voorhis, Graduate Program Director.

The Youngstown State University school psychology program is a cohortbased program and will accept students on a full-time time basis. The first year of the program commences during the summer. The requirements for applying to the YSU School Psychology program are:

- · A baccalaureate degree from a regionally accredited university or college
- Minimum undergraduate cumulative GPA of at least 3.0 or better on a 4.0 scale
- Graduate Record Examination (GRE) results (Verbal and Quantitative, Analytical Writing), only if candidate's undergraduate G.P.A. falls below a 3.0.
- · Names and contact information of three references
- · Official transcripts from all previously attended institutions
- A "Position Paper" describing
 - Motivation and reasons for selecting the field of school psychology
 - Aspirations following the receipt of the graduate degree in school
 psychology
 - Personal qualities which relate to success as a graduate student and school psychologist.
- Minimum of 9 semester hours of undergraduate or graduate work in school psychology related coursework (psychology, education, special education, social work, counseling, or other as determined by the admission committee) with a grade of "B" or better
- Completion of a Good Moral Character statement which reflects no criminal convictions which may impact your ability to work in educational settings
- An interview is the last step in the application process. Completed applications will be reviewed by the selection/admission committee to select individuals for interview. The process is competitive and meeting eligibility criteria does not assure admission into the program.
- Application Deadline: February 1st

Graduate Faculty

Carrie R. Jackson, D.Ed., Assistant Professor

Applied behavior analysis; autism spectrum disorders; neuropsychology; transition planning/vocational assessment

Richard W. VanVoorhis, D.Ed., Professor

Role and function of school psychologists; career development and counseling topics; special education service delivery; low incidence disabilities; assessment and identification issues

Successful completion of the following 45 credit semester hours and successful completion of comprehensive examination (capstone experience)

Required courses for the M.Ed. in Intervention Services are as follows:

COURSE TITLE S.H. Required Courses SPSY 6901 School Consultation 3

SPSY 6901	School Consultation	3
SPSY 6909	Identification and Support for Students with Disabilities	3
SPSY 6912	School-Based Multi-Tiered Systems of Support	3
COUN 6962	Counseling Theory	3
COUN 6973 & 6973L	Group Counseling Theory and Practice and Guided Group Counseling	3
SPSY 6904	Crisis Prevention and Response	3
PSYC 6905	Principles of Development for School Psychology	3
PSYC 6955	Psychopathology	3
SPSY 6902	Ecological School-Based Observation and Practice	3
SPSY 6905	Equitable Practices In Diversity and Inclusion	3
SPSY 6906	Role and Function of the School Psychologist	3
SPSY 7509	Family, School, & Community Systems	3
COUN 6900	Counseling Methods and Practice	3
Capstone Experien	ce	
SPSY 6907	Psycho-Educational Assessment Practices in the Schools	3
SPSY 6903		

Total Semester Hours

Learning Outcomes

- 1. Candidates will be well prepared to serve all children /students and their families including those diagnosed with high and low incidence disabilities.
- Candidates will reflect professional practices that demonstrate respect for human diversity and promote effective services, advocacy, and social justice for all children and families.
- Candidates will demonstrate the educational foundations of school psychology including the organization and operation of general, special education plus instructional and remedial techniques.
- Candidates will obtain theoretical and practical knowledge, skills and experiences related to developing appropriate mental health strategies with children, families, and groups.
- 5. Candidates will demonstrate an understanding of basic statistical and research methodologies as applied to research in the schools.
- Candidates will understand the historical, current, legal and ethical issues, alternative models of delivery, emergent technologies, and knowledge of the school psychologist's role and function.

Graduate Courses

SPSY 5965 School Psychology - Special Topics 1-5 s.h.

Selected topics related to intervention and current interest in the school of psychology field of study. Grading is S/U.

SPSY 6901 School Consultation 3 s.h.

Overviews current educational practices that have made collaboration essential to the way educational 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 candidates to function as collaborative consultants promoting systematic and planning strategies for use within the public schools, in collaboration with families, to provide services to children with disabilities. Ed. in Intervention Services Candidate. **Prereq.**: M.

SPSY 6902 Ecological School-Based Observation and Practice 3 s.h.

Provides candidates in the school psychology program with the opportunity to observe and participate in a variety of educational settings and experiences designed to support students with all types of disabilities and all grade levels. Through these activities, candidates will understand the organization of educational services, school-based systems, and student population characteristics as well as ecological factors that help to support learning. **Prereq.**: MEd in Intervention Services Candidate.

SPSY 6904 Crisis Prevention and Response 3 s.h.

An overview of the concepts of crisis intervention theory in crisis counseling and assessment including techniques for assessment, intervention, and referrals within a crisis situation. Different types of crises will be discussed with emphasis on selecting appropriate strategies for various situations. The NASP PREPaRE model of crisis prevention and response will be highlighted. **Prereq.:** MEd in Intervention Services Candidate.

SPSY 6905 Equitable Practices In Diversity and Inclusion 3 s.h.

Introduces pertinent theoretical cultural issues which relate to school psychologists as they work with diverse populations. Through lecture, discussion, and individual and group activities, candidates will develop multicultural competence allowing for appropriate individual and systemic interventions to be developed and implemented effectively. Candidates will explore their own level of cultural sensitivity as well as how their behavior impacts others, recognizing their own privilege and striving toward social justice in the educational setting.

Prereq.: MEd in Intervention Services Candidate.

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SPSY 6906 Role and Function of the School Psychologist 3 s.h.

This course provides an overview of the professional concerns and issues school psychologists face working in public school systems. Additionally, orientation for field-based practicum and internship experiences will be discussed, as well as future responsibilities for employment as a school psychologist. Historical, legal, professional, and ethical issues pertaining to the role and function of a school psychologist will be reviewed. **Prereq.:** MEd in Intervention Services Candidate.

SPSY 6907 Psycho-Educational Assessment Practices in the Schools 3 s.h.

This course is designed to provide an overview of the relevant concepts, principles and methods underlying the construction and interpretation of psychological and educational tests. Through lectures, discussion, and individual and group activities, candidates will learn about the basic concepts, competencies, issues, and tools used in psychological testing and measurement and their practical applications. In this course, candidates will gain knowledge of how psychological tests are built, what they can and cannot do, the conditions under which they should and should not be used, and how to evaluate their adequacy.

Prereq.: School Psychology Candidacy.

SPSY 6908 Research Design and Statistics for School Psychology 3 s.h. This course takes a user-oriented approach to principles of research design, descriptive and inferential statistics, measurement, and varied data collection and analysis techniques as applied to the practice and scholarship of school psychology.Ed. in Intervention Services track. **Prereq.:** M. SPSY 6909 Identification and Support for Students with Disabilities 3 s.h. An overview of special education identification procedures for students with disabilities. Candidates will develop knowledge of the definitions, assessment techniques, instructional considerations, and legislation surrounding all lowand high-incidence disabilities. Emphasis will be on the current most effective practices and research-based strategies for students with disabilities. **Prereq.**: MEd In Intervention Services Candidate.

SPSY 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).

SPSY 6912 School-Based Multi-Tiered Systems of Support 3 s.h. This course is designed to provide direct experiences in planning and evaluating multi-level academic and behavioral interventions across the three tiers of services within educational school systems for general education and students with disabilities. Intervention effectiveness metrics (effect size, percentage of non-overlapping data, goal attainment scaling) necessary for practicum and internship experiences will be covered. Participation in Response to Intervention (RtI) team meetings and concepts of curriculum, academic and applied functional behavioral analysis, progress monitoring, and determining effectiveness of interventions will be presented. **Prereq.:** MEd in Intervention Services Candidate.

SPSY 7490 Advanced Study and Practicum in Autism Spectrum Disorders 3 s.h.

This course is designed to provide candidates with skills and experience related to early assessment and diagnosis of Autism Spectrum Disorder (ASD), including case conceptualization, the skills needed to create, modify, and/or adapt assessments, the ability to interpret assessments, classroom applications, implementation and evaluation of strategies and supports, and family-school collaboration. Special emphasis will be given to the application of ABA principles to classroom settings (discrete trial, analysis of verbal behavior, and direct instruction). Through didactic teaching and experiential learning via activities completed with students attending the Rich Center for Autism, candidates will gain knowledge of assessment, evidence-based interventions, treatment methods, and related issues affecting students with ASD and their families.

Prereq.: EdS track in School Psychology.

SPSY 7500 Dynamic Assessment 1 3 s.h.

This course includes the administration and interpretation of traditional, web-based, and iPad-based intelligence tests. The goal of this course is to provide candidates with a series of experiences which will lead to mastery in the administration, scoring, and interpretation of various cognitive and instruments. Candidates will become familiar with various traditional and alternative definitions of intelligence, gain knowledge of the general rules for administration and scoring of a variety of standardized cognitive assessment measures. Candidates will demonstrate mastery in the administration and scoring of various cognitive assessment batteries e.g., most current Wechsler, Kaufman, and Woodcock-Johnson test batteries. Candidates will also be introduced to academic achievement measures associated with these cognitive assessment batteries.

Prereq.: EdS in SPSY Candidate. **Coreq.:** SPSY 7501 and SPSY 7502.

SPSY 7501 Dynamic Assessment Practicum in School Psychology 1 3 s.h. Supervised experience in the administration and scoring of cognitive and academic achievement assessment protocols utilizing the most current Wechsler, Kaufman, and Woodcock-Johnson test batteries. Candidates will demonstrate competence in recording observations, scoring assessments, generating hypotheses, and interpreting assessment results. Candidates are expected to share evaluation findings through presentations and written reports.

Prereq.: EdS in SPSY Candidate. **Coreq.:** SPSY 7500 and SPSY 7502.

SPSY 7502 Cognitive Ability, Observations Practicum 2 s.h.

Through in-person and feedback from video recorded sessions, candidates will gain supervised experiences in the administration of various psychoeducational instruments. Candidates will demonstrate mastery through formal observations of their administration and scoring for various cognitive and academic achievement measures utilizing the most current Wechsler, Kaufman, and Woodcock-Johnson test batteries.

Prereq.: EdS in School Psychology Candidate. **Coreq.:** SPSY 7500 and SPSY 7501.

SPSY 7503 Dynamic Assessment 2 3 s.h.

This course is designed to provide candidates with a theoretical foundation and the attainment of assessment skills in the areas of comprehensive academic achievement, perceptual-motor, language, social-emotionalbehavioral, vocational, and adaptive behavior assessments. Other informal assessments will be included such as interviewing, observing, conducting record reviews, etc. Topics such as scoring, interpretation, integration, decision-making, and intervention design will be included. **Prereq.:** EdS in SPSY Candidate, Candidates must have obtained a "B" or

better and reached competence in SPSY 7500, SPSY 7501, and SPSY 7502.

SPSY 7504 Behavior Assessment/Intervention Practicum 3 s.h.

Candidates are provided with supervised practica experiences in school systems in each of the following areas: utilization of a systematic, ecological approach to child study; familiarization with a variety of child study approaches including individualized classroom management, instructional materials, and teaching methodology; and furthering experience with the role of the school psychologist as a consultant. SPSY 7504 requires practicum hours to be spent in activities related to observations, interviews, and the completion of a Functional Behavioral Assessment/Behavior Intervention Plan. Candidates must have obtained a "B" or better and reached competence in SPSY 7500, SPSY 7501, and SPSY 7502.

Prereq.: EdS in SPSY Candidate. Coreq.: SPSY 75013 and SPSY 7505.

SPSY 7505 Academic Assessment/Intervention Practicum 3 s.h.

Candidates are provided with supervised practica experiences in school systems in each of the following areas: utilization of a systematic, ecological approach to child study; demonstrating competencies with respect to technology, diversity, collaboration, and professionalism; and conducting and participating in staffing procedures. SPSY 7505 requires practicum hours to be spent in the administration/interpretation of 7501 and 7503 assessment instruments and the completion of a comprehensive Multi-factored Evaluation Team report.

Prereq.: EdS in SPSY Candidate, Candidates must have obtained a "B" or better and reached competence in SPSY 7500, SPSY 7501, and SPSY 7502. **Coreq.:** SPSY 7503 and SPSY 7504.

SPSY 7506 Behavior Assessment Practicum 2 3 s.h.

Candidates will collaborate in the development of both an FBA and BIP for a student in their practicum placement site through direct student observation, informal and formal data collection methods, progress monitoring, and collaboration with IEP team. Candidates will collaborate in generating hypotheses and in the development of individualized interventions, as well as examining effectiveness of interventions via progress monitoring. Candidates will analyze/interpret evaluation and intervention data through the completion of written reports (FBA, BIP, and ETR/RR, if applicable). **Prereq.:** EdS in SPSY Candidate.

Coreq.: SPSY 7507.

SPSY 7507 Principles of ABA in School Psychology 3 s.h.

This course will develop and strengthen knowledge, understanding, and practical skills related to basic principles of applied behavior analysis (ABA) and behavior modification techniques. Candidates will gain knowledge of the principles and components imperative in conducting functional behavioral assessments (FBAs) and developing effective behavior intervention plans (BIP) in the educational environment. At the conclusion of this course, candidates will be able to construct a functional assessment interview (FAI), conduct an FBA utilizing appropriate data collection methodologies to address behavior(s) of concern, develop a BIP utilizing FBA data, select appropriate empirically supported intervention(s), and evaluate the effectiveness of implemented intervention(s).

Prereq.: EdS in SPSY candidate.

Coreq.: SPSY 7506.

SPSY 7508 Principles of Neuropsychology For the School-Based Setting 3 s.h.

The relationship of learning and brain function will be explored through awareness of neuropsychological processes, including normal and atypical development. The principles and practices of neuropsychology in the context of school-based settings will be explored, including assessment, identification, collaboration, research-based intervention, and rehabilitation for schoolaged children with neuropsychological difficulties. Neuropsychology topics related to autism spectrum disorder (ASD) and low incidence disabilities will be emphasized.

Prereq.: EdS in SPSY Candidate, SPSY 7500, SPSY 7501, and SPSY 7502.

SPSY 7509 Family, School, & Community Systems 3 s.h.

This course helps candidates understand how school psychologists interact within and among various systems to identify patterns of needs; plan and implement individual, family, and system wide interventions; and conduct program evaluation. Candidates are expected to engage in various experiential activities to enhance their professional roles in the community and schools, and through their work with families.

Prereq.: Selected Candidate in Masters of Education in Intervention Services.

SPSY 7510 Professional Development Seminar in School Psychology: Internship Preparation 1 s.h.

This course is designed to prepare and ready school psychology candidates for their proposed internship assignment. Preparation tasks includes an overview of the internship experience, interviews with university and field supervisors/school administrators, discussions related to various internship expectations, coverage of time management principles required for the internship year, and various activities related to internship state licensure. **Prereq.:** EdS in SPSY candidate.

SPSY 7511 Professional Issues in School Psychology 3 s.h.

This course involves various ethical and legal principles that have relevance to professional practice (i.e., assessing limits of competency, addressing potential dilemmas, utilizing available resources, coverage of landmark court cases, and understanding personal values and biases). Candidates are expected to fully understand and practice NASP Principles for Professional Ethics. Candidates are afforded the opportunity to review and practice various special education compliance mandates (i.e., timelines, documentation, parent rights, I.E.P development, etc.).

Prereq.: EdS in SPSY Candidate.

SPSY 7512 Internship/Supervised Experience 1 6 s.h.

Designed for those candidates who have been assigned a 1400-clock-hour internship in the state of Ohio under field and university supervision. 6 s.h. 6 s.h.

SPSY 7513 Internship/Supervised Experience 2 6 s.h.

Designed for those candidates who have been assigned a 1400-clock-hour internship in the state of Ohio under field and university supervision. 6 s.h. 6 s.h.

SPSY 7514 Internship/Supervised Experience 3 3 s.h.

Designed for those candidates who have been assigned a 1400-clock-hour internship in the state of Ohio under field and university supervision. 6 s.h. 6 s.h.

SPSY 7515 Advanced Seminar in School Psychology 1 3 s.h.

First of two-semester seminars (special topics related to school psychology internship, child study, serving low incidence populations, consultation, RTI and other topics related to the internship experience). **Prereq.:** concurrent with SPSY 7512.

SPSY 7516 Advanced Seminar in School Psychology 2 3 s.h.

Second of two-semester seminars (special topics related to school psychology internship, child study, serving low incidence populations, consultation, RTI and other topics related to the internship experience). **Prereq.:** concurrent with SPSY 7513.

Master of Fine Arts in Creative Writing

As of fall 2021, admission to the graduate program in Creative Writing has been suspended.

Applications to the program are not being accepted at this time.

Campus Coordinator

Christopher Barzak 237 DeBartolo Hall (330) 941-16553 cmbarzak@ysu.edu

NEOMFA Director

Mohammad Imad Rahman m.i.rahman@csuohio.edu

Program Description

The Master of Fine Arts program at Youngstown State University is part of the Northeast Ohio Universities Master of Fine Arts (NEOMFA) in Creative Writing. The NEOMFA is a multidisciplinary, interdepartmental, and interinstitutional program that provides opportunities for students to pursue the terminal degree in creative writing. The NEOMFA draws its faculty from departments at Youngstown State University, Cleveland State University, Kent State University, and The University of Akron.

This program offers workshops in poetry writing, fiction writing, creative nonfiction writing, and playwriting, as well as courses in literature, literary craft and theory, and professional writing and editing. The M.F.A. prepares graduates to pursue opportunities in arts management; in many areas of communication, publicity, and marketing; and in teaching creative writing, literature, and expository writing. Graduates of the program are ready to contribute to the literary life of the nation and the cultural life of the community. The program requires 48 semester hours of coursework.

Advising

All students should have their schedules approved by a graduate faculty advisor every semester. After initial enrollment in the program, the student and his or her advisor will establish a coursework plan including alternate course selections. An advisor may be chosen from the faculty of any consortium school.

Writer in the Community Certificate

The certificate option gives writers a background in community engagement that would multiply the availability of such avenues. The Certificate allows students who wish to pursue a more "practical" option while they are focusing on their creative writing. In a climate where the engagement between academia and community is more and more highly valued, the NEOMF A believes this is an ideal time to introduce this Certificate option into the program. The NEOMFA is already a unique program in being a consortium; the Certificate would only add to its distinctive character and make it more attractive to potential students.

Admission Requirements

In addition to the minimum College of Graduate Studies admissions requirements, applicants must submit three letters of recommendation and a substantive portfolio of creative work that includes either 15 to 20 pages of poetry or 30 pages of fiction, creative nonfiction, or playwriting. All portfolios must include at least one finished work. All items in the portfolio should be double-spaced. The letters of recommendation should come from individuals familiar with the applicant's academic or professional background. The letters should include an assessment of the applicant's current work quality and ability to successfully complete graduate training. Application to the M.F.A. program authorizes staff members at participating institutions to have access to all student academic records and application materials.

The NEOMFA program accepts students for fall admission only.

Admission to the Creative Writing program as part of NEOMFA (Northeast Ohio Universities Master of Fine Arts) involves applying and submitting items to both YSU and NEOMFA. The materials needed and where they are to be sent are as follows:

- 1. Official College Transcripts these should be send the the Graduate Office of YSU.
- Three Letters of Recommendation Each letter needs to be sent as an attachment to both YSU and NEOMFA. They can be sent electronically via email to gradcollege@ysu.edu and <u>neomfa.applicants@gmail.com.</u>
- Statement of Goals needs to be sent as an attachment to NEOMFA at <u>neomfa.applicants@gmail.com.</u>
- 4. Creative Portfolio This needs to be sent to NEOMFA at neomfa.applicants@gmail.com.

Content details for the Statement of Goals and Creative Portfolio and how they are submitted can be found on the NEOMFA website at <u>http://neomfa.org/prospective-students.</u>

Graduate Faculty

Christopher Barzak, M.F.A., Professor Fiction writing; fiction; contemporary British and American literature

All M.F.A. students must complete 48 semester hours in graduate-level courses. There are six areas of coursework in the M.F.A.:

COURSE	TITLE	S.H.
Writing Workshop	DS	15
Craft and Theory	courses	9
Literatures courses		6
Internship		3
Electives		9
Thesis		6
Total Semester Hours		48

The thesis must be submitted according to the general requirements established by the College of Graduate Studies. The student is required to defend the thesis in an oral presentation before a committee of graduate faculty from a minimum of two consortium schools.

Writing in the Community Certificate

Course requirement for obtaining the certificate would be 4 classes, 12 credit hours, described below:

1. Teaching Creative Writing in the Community.

This course will prepare students to apply their knowledge of creative writing and participate in a community-based teaching residency.

2. Writing in the Community Internship.

For the practicum experience students will be placed in the community to teach creative writing for at least one contact hour per week for ten to fifteen weeks in a setting agreed upon by the students and the advisor.

3. Writing in the Community Paper.

This is the only new course required by the Certificate (see attached Request for Graduate Curriculum Action). The culminating experience of the Writer in the Community Certificate is the Certificate Paper. The paper is to be a high quality, publishable paper of 20 to 25 pages and draw on practicum experience, research, and developed pedagogy of teaching writing in the community. Regular consultation with the advisor is required.

4. Professional Writing Elective.

Students select a professional writing course, to be approved by an advisor, to further expand the connection between creative writing and organizational writing. At YSU, such courses would include the following: ENGL 6943, 6949.6953

Learning Outcomes

Students will create a high quality publishable work of poetry, fiction, creative non-fiction, play writing, and literary translation

Students will be able to critique literary works in a workshop environment

Students will have knowledge of a wide range of theories and practices of creative writing and the creative process

Students will have hands-on experiences in real-world writing and writingrelated situations such as art agencies, public schools, and community centers

ENGL 6900 Methods of Literary Research 3 s.h.

Basic concepts and methods of literary research and analysis.

ENGL 6901 Methods of Composition Research 3 s.h.

Theories and methods of composition research; emphasis on strategies for conducting, analyzing, and writing about classroom and workplace studies.

ENGL 6902 Literary Thought 3 s.h.

May focus on particular theoretical approaches or provide an overview of literary criticism. May be repeated once with a different topic.

ENGL 6906 Teaching of Literature 3 s.h.

Problems, issues, practices, and research that affect the teaching of literature at various grade levels and in college courses.

ENGL 6907 Teaching of Writing 3 s.h.

Problems, issues, practices, and research that affect the teaching of writing at various grade levels and in college courses.

ENGL 6911 The Medieval World 3 s.h.

Study of selected literary works reflecting medieval thought and culture. May be repeated once with a different topic.

ENGL 6912 Sixteenth- and 17th-Century British Studies 3 s.h.

Nondramatic literature of the British Renaissance. May be repeated once with a different topic.

ENGL 6913 Shakespeare and Renaissance Drama 3 s.h.

Varying emphases on the dramatic works of Shakespeare and/or his contemporaries. May be repeated once with a different topic.

ENGL 6914 Restoration and 18th-Century British Studies 3 s.h.

Prose, poetry, and/or drama of the period studied in historical and cultural context and from various critical perspectives. May be repeated once with a different topic.

ENGL 6915 Early American Studies 3 s.h.

Prose, poetry, and/or drama from the colonial period up to the early 19th century examined in their historical and cultural contexts. May be repeated once with a different topic.

ENGL 6916 Nineteenth-Century British Studies 3 s.h.

Prose, poetry, and/or drama of the period studied in historical and cultural context and from various critical perspectives. May be repeated once with a different topic.

ENGL 6917 Nineteenth-Century American Studies 3 s.h.

Examines 19th-century American literature and culture through particular themes, genres, styles, periods, and/or figures. May be repeated once with a different topic.

ENGL 6918 Studies in Children's Literature 3 s.h.

Contemporary children's literature. Emphasis may be on development, trends, critical standards, cultural context, classroom selection and use. May be repeated once with a different topic.

ENGL 6919 Studies in Young Adult Literature 3 s.h.

Contemporary young adult literature. Emphasis may be on development, trends, critical standards, cultural context, classroom selection and use. May be repeated once with a different topic.

ENGL 6920 Twentieth-Century British Studies 3 s.h.

Prose, poetry, and/or drama of the period studied in historical and cultural context and from various critical perspectives. May be repeated once with a different topic.

ENGL 6922 Twentieth-Century American 3 s.h.

Studies. Examines works in relation to the history and social and cultural developments of the period. Nonliterary texts may be included, such as film, visual arts, and music. May be repeated once with a different topic.

ENGL 6923 Working Class Literature 3 s.h.

A study of working-class literature, culture, and artistic production, with emphasis on the literary history, the material conditions, and the intersection of race, ethnicity, gender, and sexual orientation in the works of literature by and about the working class.

ENGL 6927 Historical Survey of Literature for Young People 3 s.h.

Survey of historical developments from the 18th through mid-20th centuries in British and American literature for young people.

ENGL 6935 Studies in Romanticism 3 s.h.

Prose, poetry, and/or drama of the period studied in historical and cultural context and from various critical perspectives. May be repeated once with a different topic.

ENGL 6943 Public and Professional Writing 3 s.h.

Exploration of scholarly and practical approaches for writing for public, professional, and technical audiences. Students examine the use of writing in public and professional organizations, government, nonprofit sectors, safety and health professions, and political and social campaigns. With an emphasis on theories and practices of approaching audience and purpose, students consider rhetorical and ethical demands of writing in public, professional and technical contexts.

ENGL 6944 Document Design and Production 3 s.h.

Application of computer software and hardware to design and produce professional/technical documents.

ENGL 6945 Grant Writing 3 s.h.

Study of various issues and strategies involved in writing grant proposals to help solve a range of problems and support various causes that improve people's lives and communities. Students learn how grant proposals enable significant research in natural, behavioral, and social sciences; facilitate civic and educational projects; and advance community development and artistic initiatives. Students learn the functions and conventions of grant proposals, the range of research required to write grant proposals, and the rhetorical and practical processes that produce them and lead to approval. The course emphasizes two key stages of writing grant proposals: developing the proposal (including defining needs, reviewing existing projects and literature, and researching sources of funds), and writing the proposal with a particular audience in mind.

Prereq.: Graduate Standing.

ENGL 6946 Historical Editing 3 s.h.

Project-based approach to theoretical and practical aspects of editing historical and literary documents for both print and digital contexts. Topics include document selection, transcription, verification, and annotation, as well as the implications for teaching and learning using traditional print and electronic archives and texts. **Cross-Listed:** HIST 6946.

ENGL 6947 Proposal Writing 3 s.h.

Graduate level introduction to the structural, rhetorical, and linguistic aspects of professional proposals, with a focus on grant proposals. Students examine the role of proposals in serving the needs and interests of organizations and individuals. Requirements include writing one grant proposal for a client and one other type of proposal (e.g., a research project proposal or book prospectus).

ENGL 6948 Healthcare Communication 3 s.h.

Graduate level introduction to how healthcare information is conveyed by healthcare researchers, providers, and writers, to experts and non-experts. Students examine how people find and use medical information in making healthcare decisions. Students consider issues of health literacy, research methods, ethics, public and private clinical communication, patient education, and visual design. Requirements include writing a report on a medical talk, a healthcare-related press release, and a client-based healthcare communication project.

ENGL 6949 Professional and Technical Editing 3 s.h.

A study of the skills needed to make appropriate changes in the content, grammar, mechanics, style, format, and organization of manuscripts for scholarly, trade, journalistic, and other professional publications. The course deals with stages in the publishing process, hard-copy versus online editing, mechanical and substantive editing, and the use of house and press styles.

ENGL 6950 Sociolinguistics 3 s.h.

An investigation of the relationship between language and society. Includes discussion of dialects and standard languages, language planning, linguistic identity, multi- and bilingualism, class, gender, ethnicity, and social interaction.

ENGL 6951 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.

ENGL 6952 Linguistics of Literacy 3 s.h.

An investigation of the linguistic, social, and cultural dimensions of literacy. The course covers theoretical frameworks of language and literacy, the relationship between speech and writing, cultural notions of literacy, and the acquisition of literacy in first and additional languages.

ENGL 6953 Publications Issues and Management 3 s.h.

Exploration of the issues involved in managing and producing professional publications, including publications in students' own fields. Focus on organizational, editorial, and authorial voice; editorial policies; audience analysis; and the processes by which publications are conceived, designed, and produced.

ENGL 6954 Language Assessment 3 s.h.

This course seeks to develop the language assessment literacy of teachers and TESOL Endorsement candidates. The content of the course emphasizes theoretical and practical study of instruments and procedures for assessing culturally and linguistically diverse students. Candidates will design and use standardized (formal) and instructional (informal) evaluative methods to learn to assess students' linguistic and academic development, and will conduct critical analyses of existing tools for assessment in terms of their reliability, bias, and validity. Candidates will be able to use assessment to distinguish between levels of language proficiency in decisions of educational plan or placement.

ENGL 6955 Advanced Linguistics 3 s.h.

In-depth study of selected issues in contemporary linguistic theory.

ENGL 6956 TESOL Methods 3 s.h.

Introduction to teaching English as a second language (ESL), including reading, writing, listening, and speaking. Focus will be on using communicative methods with nonnative speakers.

ENGL 6957 TESOL Practicum 3 s.h.

Supervised teaching in an English as a second language (ESL) program. Additionally, weekly seminar attendance is required.

ENGL 6958 English Grammar 3 s.h.

Descriptions and analysis of English grammar structure.

ENGL 6960 Studies in Linguistics 3 s.h.

Examines a specific topic such as stylistics, semantics, sociolinguistics, second language acquisition, TESOL, or computational linguistics. May be repeated twice with a different topic.

ENGL 6963 Perspectives in Multicultural Studies 3 s.h.

An advanced study of primary and secondary texts from the field of multicultural literature and multicultural education. The course will emphasize the formation of social identities, the intersections of race, class, and gender, relationships among dominant and nondominant subjects in U.S. and other global cultures. The course will pay special attention to the theory and application of multiculturalist paradigms to education, professional work, and graduate study. May be repeated once with a different topic.

ENGL 6965 Studies in Film 3 s.h.

Analysis of motion pictures and their creators; topics may include classic and contemporary styles, genres, and methods of production, as well as film theory and criticism. May be repeated once with a different topic.

ENGL 6966 Writing of Poetry 3 s.h.

Discussion and application of approaches, techniques, and forms involved in the writing of poetry. May be repeated once with a different topic.

ENGL 6967 Writing of Prose 3 s.h.

Discussion and application of approaches, techniques, and forms involved in the writing of fiction and/or nonfiction. May be repeated once with a different topic.

ENGL 6968 Studies in Literary Form 3 s.h.

Examines forms such as poetry, the novel, the short story, essay, biography, autobiography, or travel literature. Emphasis may be on definition, development, cultural context, figures, or themes. May be repeated once with a different topic.

ENGL 6969 Writing the Youth Novel 3 s.h.

Discussion and application of approaches, techniques, and forms involved in the writing of novels.

ENGL 6974 English Education Workshop 1-3 s.h.

Intensive study and activity in a topic related to teaching English and the language arts. Does not count toward degree credit. Grading is S/U. May be repeated.

ENGL 6975 English Education Seminar 1-3 s.h.

Approaches to teaching English and the language arts. May be repeated once with a different topic.

ENGL 6976 Studies in English Education 3 s.h.

Theories, issues, and/or criticism in the teaching of English. May be repeated once with a different topic.

ENGL 6989 Teaching Practicum 1-3 s.h.

Techniques and strategies for teaching college composition, including course design and classroom practice. Required of and limited to graduate assistants who are teaching in the English Department. First-year graduate assistants must register for three semester hours of Teaching Practicum in two successive semesters for a total of six semester hours. Does not count toward degree credit. Grading is S/U.

ENGL 6990 Special Topics 3 s.h.

May be repeated once.

ENGL 6991 Special Topics MFA 3 s.h.

Special topics in literature and creative writing for students in the Master of Fine Arts (MFA) program in creative writing. May be repeated once. **Prereq.:** Acceptance in the MFA program.

ENGL 6992 Professional Communication 3 s.h.

Focus on a selected topic in technical writing or professional communication (e.g., proposal writing, science writing, computer documentation, nonfiction prose). May be repeated once with a different topic.

ENGL 6993 Discourse Theory 3 s.h.

Examination and discussion of contemporary theories of discourse analysis, with some attention to the history and development of rhetorical theory.

ENGL 6996 TESOL/Applied Linguistics Internship 1-3 s.h.

Supervised work-and-learn experience for students interested in TESOL (Teaching English to Speakers of Other Languages) and/or applied linguistics. Students spend 3-10 hours per week working for an approved field site, inperson or online. Enrollment is contingent upon the availability of internships. Students must be recommended for this experience by program faculty. ENGL 6996 may be repeated once.

Prereq.: ENGL 6956, ENGL 6957, program faculty recommendation.

ENGL 6997 English Internship 1-3 s.h.

Supervised work-and-learning experience in English under the direction of an English Department faculty member and an employee of a participating firm. Ten to 20 hours a week of student time are expected. Enrollment is contingent upon the availability of internships. Students are selected on the basis of personal qualifications, including GPA, courses taken, recommendations, and an interview. Either ENGL 6997 or ENGL 6998 may count toward the degree, not both.

ENGL 6998 Professional Writing Internship 1-3 s.h.

Supervised work-and-learning experience in professional communication under the direction of a University faculty member and an employee of a participating firm. Ten to 20 hours a week of student time are expected. Enrollment is contingent upon the availability of internships. Students are selected on the basis of personal qualifications, including GPA, courses taken, recommendations, and an interview. Either ENGL 6997 or ENGL 6998 may count toward the degree-not both.

ENGL 6999 Thesis 1-3 s.h.

Thesis.

Prereq.: Thesis proposal accepted by departmental committee.

Master of Health and Human Services Program Director

Dr. Daniel J. Van Dussen

330-941-1683

djvandussen@ysu.edu

Program Description

The Master of Health and Human Services program prepares students from health and human services backgrounds with the skills and abilities for supervisory/managerial or health promotion positions in the community. The program is structured as a completely online program. After completion of an academic core of coursework, students may concentrate in health promotion, health care administration or health informatics for health and human service professions.

Admission Requirements

In addition to the minimum College of Graduate Studies admission requirements, applicants must complete the following undergraduate courses or their equivalent:

COURSE	TITLE	S.H.	
Research Met	hodology OR Statistics	 T	0

Students should complete any undergraduate deficiency coursework before completion of the third semester of graduate work and must complete it prior to enrolling in related graduate-level courses. Also, applicants must submit the name, relationship, e-mail address and phone number of people who are familiar with their professional background.

Regular admission requires a cumulative undergraduate grade point average of at least 3.0 (on a 4.0 scale). Students with a 2.7-2.99 can be considered for provisional admission.

Graduate Faculty

John M. Hazy, Ph.D., Professor, Chair

Community/behavioral health (drugs and crime); methodology and assessment; life course and cultural issues; teaching effectiveness

Nicolette Powe, Dr.P.H., Associate Professor Health equality; chronic diseases; cancer prevention; healthy lifestyles

Daniel J. Van Dussen, Ph.D., Professor

Social and psychological determinants of health among older adults; the family; social support; statistics and methods

There are two areas of coursework in the MHHS: an academic core and a specialty track. A thesis or non-thesis option is available with each track.

The academic core consists of 18 semester hours distributed among the following course areas:

- · Research and Statistics (3 semester hours),
- Health service and health performance courses (15 semester hours)

A total of 11-18 semester hours of coursework is devoted to a specialty track in health promotion, administration for health and human service professions,long term care administration or health informatics. Each track offers a thesis or non-thesis option. The non-thesis option in the health promotion, administration for health and human service professions, and health informatics track requires the student to complete an internship. The thesis must be submitted according to the general requirements established by the College of Graduate Studies. The student is required to defend the thesis in an oral presentation before a committee of graduate faculty from a minimum of two academic disciplines.

COURSE	TITLE	S.H.
Academic Core		
HHS 6962	Health Care Policy	3
HHS 6922	Planning and Fiscal Management	3
HHS 6960	Health Education and Promotion	3
HHS 6930	Health Informatics	3
HHS 6989	Health Research Methods	3
HHS 6958	Health Services Issues	3

Total Semester Hours

Select one of the following tracks

COURSE TITLE

Health Promotion	Track	
HHS 6949	Community Health Practice	3
HHS 6918	Program Planning and Evaluation	3
HHS 6953	Health Behavior	3
HHS 6990	Internship (or)	2-3

	Thesis	
Total Semester Ho	ours	11-12
COURSE	TITLE	S.H.
Health Care Admir	nistration Track	
HHS 6918	Program Planning and Evaluation	3
HHS 6932	Health Care Administration	3
HHS 6971	Human Resorce Management for Healthcare Administration	3
HHS 7002	Long term Care	3
HHS 6990	Internship	2-3
or HHS 6999	Thesis	
Total Semester Ho	ours	14-15
COURSE	TITLE	S.H.
Health Informatics	s Track	
	s Track Clinical Informatics	3
HHS 6935		3
HHS 6935 HHS 6945	Clinical Informatics	
Health Informatics HHS 6935 HHS 6945 HHS 6955 HHS 6990	Clinical Informatics Health Care System Analysis	3
HHS 6935 HHS 6945 HHS 6955	Clinical Informatics Health Care System Analysis Health Care Quality in the Electronic Health Record	3 3

Learning Outcomes

1. Students will demonstrate a global understanding of healthcare in the areas of management, promotion and informatics.

2 Students will be able to understand the line of healthcare services and supports across the lifecourse.

3. Students will be able to analyze and synthesize information from the research to respond to questions related to healthcare challenges.

4. Students will demonstrate skills to lead, plan and evaluate programming in healthcare.

Graduate Courses

HHS 6900 Special Topics 1-3 s.h.

Topics may vary from semester to semester and will be announced along with prerequisites and hours. May be repeated once for a total of six hours.

HHS 6918 Program Planning and Evaluation 3 s.h.

Principles of planning, developing, implementing, and evaluating programs for nonprofits to improve outcomes.

Prereq.: College of Health and Human Services student or permission of instructor.

HHS 6922 Planning and Fiscal Management 3 s.h.

Principles and skills to conduct strategic plans, analyze and administer programs, develop budgets, and familiarize students with fiscal matters related to funding sources. Three hour lecture.

HHS 6930 Health Informatics 3 s.h.

18

S.H.

This course presents a detailed review of the structure of provider, payer, and other health care organizations along with the workflow in these types of organizations and their information system needs; how informatics assists these organizations; how information is used in business and clinical operations; and how information technologies interact with business and clinical stakeholders.

Prereq.: MHHS student or permission of instructor.

HHS 6932 Health Care Administration 3 s.h.

This course focuses on the fundamental philosophy and techniques common to healthcare Administration. Students will develop skills related to the following broad healthcare management competencies: (1) communication and relationship management, (2) professionalism, (3) leadership, (4) knowledge of the healthcare system, and (5) business skills and knowledge. A key feature of this course is the use of a well-known simulation model call FlexSim. Students utilize a copy of the simulation model and detailed case studies of the simulation from major hospital systems across the US. **Prereq.:** acceptance to the MHHS Program.

HHS 6935 Clinical Informatics 3 s.h.

This course will provide Health and Human Services student with a comprehensive framework of Clinical informatics knowledge. It addresses how clinical informatics assists health care organizations, how information is used in clinical operations, and how information technologists interact with clinical stakeholders in provider, payer, and other healthcare organizations. Health care delivery applications include electronic health records, clinical information systems, Tele-health, patient safety, patient and community education, and care management. Students will analyze the informatics function and organizational relationships in their organizations.

Prereq.: Current enrollment in the MHHS or MSN program, or with permission of the instructor; Senior nursing students may take with permission from the Nursing department and the Graduate College.

HHS 6945 Health Care System Analysis 3 s.h.

This course presents a practical approach to introduce students to information technology and systems development. The course emphasizes the importance of system analysis and design in health care/business and clinical environments. The focus is on producing an add application that is integrated with your vendor applications.

Prereq.: Current enrollment in the MHHS or MSN program and successful completion of HHS 6930.

HHS 6949 Community Health Practice 3 s.h.

An examination of various physiological, psychological, and sociological factors which influence the health and provision of healthcare in a community. **Prereq.:** AHLT 4810 and PHLT 3791 or equivalent or permission of instructor.

HHS 6953 Health Behavior 3 s.h.

A review of research studies, theories, and models which identify elements that influence behavior and determine factors which deter positive behaviors. **Prereq.:** HHS 6949 or permission of instructor.

HHS 6955 Health Care Quality in the Electronic Health Record 3 s.h.

This course presents a review of the Electronic Health Record and the US National Health Information Network. Structure of provider, payer, and other health care organizations along with the work flow in these types of organizations and their information system's needs. It addresses how informatics assists these organizations, how information is used in business and clinical operations, and how information technologists interact with business and clinical stakeholders in provider, payer, and other healthcare organizations. Students will analyze the informatics function and organizational relationships in their organizations.

HHS 6958 Health Services Issues 3 s.h.

An examination of current philosophical, legal, and ethical issues in healthcare with the inclusion of the role of health professionals in national health policy, and healthcare reform.

Prereq.: HHS 6949 or permission of instructor.

HHS 6960 Health Education and Promotion 3 s.h.

Developing effective health promotion programs through a study of the history, philosophy, ethics, and values of health promotion.

Prereq.: Admission to the MHHS program or permission of the instructor.

HHS 6962 Health Care Policy 3 s.h.

The purpose of the course is to give students the skills necessary to understand all aspects of health and health care especially those related to Health Care policy and delivery. It will examine the supply of and demand for health services, and the analysis of health care systems and current, previous and potential future legislation relevant to health care. Topics will include Medicare, Medicaid, the Affordable Care Act, the Older Americans Act, and trends in health insurance coverage.

Prereq.: MHHS or OMBA major.

HHS 6971 Human Resorce Management for Healthcare Administration 3 s.h.

An examination of the motivational culture and performance in health and human services organizations. Includes the impact of resource management, personnel selection, recruitment, retention, and the motivational system in relation to employee performance and commitment. Three hour lecture.

HHS 6989 Health Research Methods 3 s.h.

This course serves as an introduction to major methodological issues and basic statistics in the social scientific study of health and healthcare. 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.

HHS 6990 Internship 1-6 s.h.

Supervised internship in selected health and human services facilities offering health and human services administration experience. 120 to 1000 hours per semester.

Prereq.: Approval of advisor.

HHS 6999 Thesis 1-4 s.h.

HHS 7002 Long term Care 3 s.h.

This course will introduce students to the following topics: h.

Health Informatics Certificate Program Director

Dr. Ron Chordas (Interim) (330) 941-3113 rkchordas@ysu.edu (jplyons@ysu.edu)

The Health Informatics was designed for students in the Computer Science Information Systems (CSIS) interested in working in Health Care to earn a certificate which will help them gain employment in the Health Care field which has undergone a significant advancement in recent years in the area of Health Information Systems. MHHS students will also have an opportunity to receive additional training in Computer Science Information Systems leading to a Health Informatics Certificate in addition to their MHHS Degree.

Admission Requirements

Admission to the HHS or CSIS program.

Certificate Requirements

COURSE	TITLE	S.H.
Complete 3 seme	ester hours of the following:	
HHS 6949	Community Health Practice	
HHS 6953	Health Behavior	
HHS 6958	Health Services Issues	
HHS 6962	Health Care Reform	
Complete 9 semester hours of the following		
HHS 6930	Health Informatics	
~ *		

CSCI 6920	Theory and Practice of Information Systems	
HHS 6935	Clinical Informatics	
HHS 6945	Health Care System Analysis	3
or		
CSCI 6951	Data Science and Machine Learning	
HHS 6955	Health Care Quality in the Electronic Health Record	3
Complete 6 seme	ster hours of the following:	
HHS 6900	Special Topics	
HHS 6922	Planning and Fiscal Management	
HHS 6918	Program Planning and Evaluation	
CSCI 6901	Principles of Computer Programming	3
or		
CSCI 6971	Cloud Computing and Big Data	

Learning Outcomes

- 1. To prepare future health informatics leaders who understand the complex interplay among the health informatics stakeholder communities,
- To enhance the ability to use the inter-relationships among health information technology, the healthcare delivery and regulatory processes, and information management,\
- 3. To grow a set of leadership behaviors that emphasizes professional competence, moral and ethical performance,
- To demonstrate professional and technical competence in health informatics,
- 5. To instill a dedication to the use of technology for the benefit of humanity,
- 6. To create a sensitivity to the impact that the use of technology has on the person, and
- 7. To build a desire for life-long professional learning and development in health informatics.

Master of Music

Program Director

Joseph Carucci (https://academics.ysu.edu/cliffe-college-of-creative-arts/ leadership-administration/joseph-carucci/), D.M.A.

Director and Professor

Dana School of Music (https://ysu.edu/academics/cliffe-college-creativearts/dana-school-of-music/) and University Theatre (https://ysu.edu/ccca/ university-theatre/) Bliss Hall 3010

1 Tressel Way Youngstown, OH 44555 330.941.1439 jwcarucci@ysu.edu

Program Description

The Master of Music degree (M.M.) offers exceptional advanced training for performers, teachers, composers, and scholars. The M.M. provides individualized instruction that focuses on the professional development and unique career goals (https://ysu.edu/academics/cliffe-college-creative-arts/ dana-school-of-music/careers/) of each student. Working closely with a worldclass faculty (https://ysu.edu/academics/cliffe-college-creative-arts/ dana-school-of-music/faculty/) of performers, composers, and scholars, students develop advanced competencies in their majors—which include a 100% Online M.M. in Music Education (p. 60) and a M.M. in Performance (p. 62). They also have opportunities to diversify their portfolios with elective courses and specializations across other areas that are relevant to their field. The M.M. in Music Education degree culminates in a capstone project. The M.M. in Performance degree includes four semesters of studio instruction on either an instrument or voice and culminates in public solo recitals. The dedicated faculty in the Dana School of Music (https://ysu.edu/academics/cliffe-collegecreative-arts/dana-school-of-music/) are actively engaged in helping students successfully transition into a wide range of careers nationally and across the globe.

Graduate Assistantships

Graduate Assistantship (https://ysu.edu/academics/college-graduatestudies/assistantships-and-fellowships/) (GA) positions may be available to admitted graduate music majors. Please see the Graduate Assistantship (https://ysu.edu/academics/college-graduate-studies/assistantships-andfellowships/) page for more information.

Facilities

The Dana School of Music (https://ysu.edu/academics/cliffe-college-creativearts/dana-school-of-music/), an All-Steinway School, is located in Bliss Hall, home of the Cliffe College of Creative Arts (https://academics.ysu.edu/cliffecollege-of-creative-arts/) and the performing arts complex that houses the Dana School of Music and University Theatre. The school houses the 248-seat Bliss Recital Hall with a Schlicker organ, a state-of-the-art recording studio, 92 Steinway instruments, large and chamber ensemble rehearsal spaces, and 80 acoustically treated practice rooms. Students also utilize more than 140 studios, classrooms, and keyboard and computer laboratories.

Accreditation

Youngstown State University 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: 2024
- Academic Year of Next Scheduled Comprehensive Review: 2032-33

Dana School of Music requirements for entrance and graduation are in accordance with NASM's published regulations.

Careers

Our students hone exceptional artistic and technical abilities, and their education gives them one of the most competitive skills in today's job market: **creativity**. They also develop a range of other valuable transferable proficiencies, including critical thinking, interpersonal skills, and a strong work ethic. Dana School of Music students and alumni regularly earn national and international recognition in performance, teaching, and research. They win competition awards, are accepted to prestigious graduate programs, are awarded fellowships and internships, earn positions as academic faculty, and more.

Our alumni (https://academics.ysu.edu/cliffe-college-of-creative-arts/alumnigiving/) are Grammy® Award winners, Nashville Songwriters Hall of Fame members, performers with the Jazz at Lincoln Center Orchestra, and awardwinning producers and arrangers, among others. Our graduates earn degrees in areas about which they are passionate, and their skills are applicable to careers (https://ysu.edu/academics/cliffe-college-creative-arts/dana-schoolof-music/careers/) in numerous professions. Professional opportunities with a master's degree from the Dana School of Music (https://ysu.edu/academics/ cliffe-college-creative-arts/dana-school-of-music/) at Youngstown State University are greater than ever.

Contact Information

To learn more about our degree programs, audition information, Graduate Assistantships and Fellowships (https://ysu.edu/academics/collegegraduate-studies/assistantships-and-fellowships/), careers (https://ysu.edu/ academics/cliffe-college-creative-arts/dana-school-of-music/careers/), performances, faculty, and students, visit Dana School of Music (https:// ysu.edu/academics/cliffe-college-creative-arts/dana-school-of-music/) or contact us at 330.941.3636.

To schedule a personalized campus visit, contact the Cliffe College of Creative Arts (https://academics.ysu.edu/cliffe-college-of-creativearts/) Program Coordinator of Admissions and Recruitment at 330.941.2346 or sawaltman@ysu.edu. We would love to learn about your interests, talk with you about our programs, and become an important part of your future.

Graduate Faculty

Joseph W. Carucci (https://academics.ysu.edu/cliffe-college-of-creative-arts/leadership-administration/joseph-carucci/), D.M.A.

Director and Professor

Dana School of Music (https://ysu.edu/academics/cliffe-college-creativearts/dana-school-of-music/) and University Theatre (https://ysu.edu/ccca/ university-theatre/) 330.941.1439 iwcarucci@ysu.edu

Research Interests: Jazz; music industry; music education

Kent J. Engelhardt (https://ysu.edu/people/kent-engelhardt/), Ph.D.

Professor Bliss Hall 2212 330.941.1543 kjengelhardt@ysu.edu Research Interests: Charlie Parker; Bebop; Kansas City Jazz

Francois P. Fowler (https://ysu.edu/people/francois-fowler/), D.M.

Professor Bliss Hall 3043 330.941.3479 fpfowler@ysu.edu Research Interests: Guitar performance; pedagogy; literature

Bryan Helsel (https://ysu.edu/people/bryan-helsel/), Ph.D.

Lecturer Bliss Hall 3035 330.941.3639 bhelsel@ysu.edu Research Interests: Audio + Music Production; Choral Music Education

Daniel Keown (https://ysu.edu/people/daniel-keown/), Ph.D. Associate Professor

Bliss Hall 3153 330.941.3645 dkeown@ysu.edu Research Interests: Psychology of music in multimedia; film music pedagogy; music education; technology integration in music teaching; music creativity

Christopher Krummel (https://ysu.edu/people/dr-christopher-krummel/), D.M.A. Professor Bliss Hall 1248 330.941.1838

330.941.1838 clkrummel@ysu.edu

J. Paul Louth (https://ysu.edu/people/paul-louth/), Ph.D. Professor

Bliss Hall 3149 330.941.1829 jplouth@ysu.edu **Research Interests**: Instrumental music education; brass methods; trombone

David S. Morgan (https://ysu.edu/people/dave-morgan/), D.M.A. Professor Bliss Hall 3041 330.941.1930 dsmorgan@ysu.edu Research Interests: Jazz performance; composition; music theory

Caroline Oltmanns (https://ysu.edu/people/caroline-oltmanns/), D.M.A.

Professor Bliss Hall 1240 330.941.1826 cmoltmanns@ysu.edu Research Interests: Piano performance

Glenn Schaft (https://ysu.edu/people/glenn-schaft/), D.M.A.

Professor Bliss Hall 2234 330.941.2643 geschaft@ysu.edu Research Interests: Percussion; classical, contemporary, jazz, Afro-Cuban, and Brazilian music

Misook Yun (https://ysu.edu/people/misook-yun/), D.M.A.

Professor Bliss Hall 3159 330.941.3644 myun@ysu.edu Research Interests: Opera; oratorio; chamber music; art songs

Graduate Courses

BASS 5800A Bassoon 1 s.h. Private Music Lessons.

BASS 5800B Bassoon 1 s.h. Private Music Lessons.

BASS 6901 Bassoon 2 s.h. Private Music Lessons.

BASS 6902 Bassoon 2 s.h. Private Music Lessons.

BASS 6903 Bassoon 3 s.h. Private Music Lessons.

BASS 6904 Bassoon 3 s.h. Private Music Lessons.

BASS 6905 Bassoon 4 s.h. Private Music Lessons.

BASS 6906 Bassoon 4 s.h. Private Music Lessons.

CELL 5800A Cello 1 s.h. Private Music Lessons.

CELL 5800B Cello 1 s.h. Private Music Lessons.

CELL 6901 Cello 2 s.h. Private Music Lessons.

CELL 6902 Cello 2 s.h. Private Music Lessons.

CELL 6903 Cello 3 s.h. Private Music Lessons.

CELL 6904 Cello 3 s.h. Private Music Lessons.

CELL 6905 Cello 4 s.h. Private Music Lessons.

CELL 6906 Cello 4 s.h. Private Music Lessons.

CLAR 5800A Clarinet 1 s.h. Private Music Lessons.

CLAR 5800B Clarinet 1 s.h. Private Music Lessons. CLAR 6901 Clarinet 2 s.h. Private Music Lessons. CLAR 6902 Clarinet 2 s.h. Private Music Lessons CLAR 6903 Clarinet 3 s.h. Private Music Lessons. CLAR 6904 Clarinet 3 s.h. Private Music Lessons CLAR 6905 Clarinet 4 s.h. Private Music Lessons. CLAR 6906 Clarinet 4 s h Private Music Lessons. CNDC 6901 Conducting 2 s.h. Private Music Lessons CNDC 6902 Conducting 2 s.h. Private Music Lessons. CNDC 6903 Conducting 3 s.h. Private Music Lessons CNDC 6904 Conducting 3 s.h. Private Music Lessons. CNDC 6905 Conducting 4 s.h. Private Music Lessons. CNDC 6906 Conducting 4 s.h. Private Music Lessons. FHRN 5800A French Horn 1 s.h. Private Music Lessons. FHRN 5800B French Horn 1 s.h. Private Music Lessons. FHRN 6901 French Horn 2 s.h. Private Music Lessons. FHRN 6902 French Horn 2 s.h. Private Music Lessons. FHBN 6903 French Horn 3 s h Private Music Lessons. FHBN 6904 French Horn 3 s h Private Music Lessons. FHRN 6905 French Horn 4 s.h. Private Music Lessons FHRN 6906 French Horn 4 s.h. Private Music Lessons FLUT 5800A Flute 1 s.h. Private Music Lessons. FLUT 5800B Flute 1 s.h. Private Music Lessons. FLUT 6901 Flute 2 s.h. Private Music Lessons. FLUT 6902 Flute 2 s.h. Private Music Lessons. FLUT 6903 Flute 3 s.h. Private Music Lessons. FLUT 6904 Flute 3 s.h. Private Music Lessons. FLUT 6905 Flute 4 s.h. Private Music Lessons.

FLUT 6906 Flute 4 s.h. Private Music Lessons.

GUIT 5800A Guitar 1 s.h. Private Music Lessons.

GUIT 5800B Guitar 1 s.h. Private Music Lessons.

GUIT 6901 Guitar 2 s.h. Private Music Lessons.

GUIT 6902 Guitar 2 s.h. Private Music Lessons.

GUIT 6903 Guitar 3 s.h. Private Music Lessons.

GUIT 6904 Guitar 3 s.h. Private Music Lessons.

GUIT 6905 Guitar 4 s.h. Private Music Lessons.

GUIT 6906 Guitar 4 s.h. Private Music Lessons.

MCMP 6903 Advanced Composition 3 s.h.

Individual instruction in the composition of larger forms for chorus, orchestra, or chamber ensembles. **Prereq.:** Permission of instructor.

MCMP 6904 Advanced Composition 3 s.h.

Individual instruction in the composition of larger forms for chorus, orchestra, or chamber ensembles. **Prereq.:** Permission of instructor.

MCMP 6905 Advanced Composition 3 s.h.

Individual instruction in the composition of larger forms for chorus, orchestra, or chamber ensembles.

Prereq.: Permission of the instructor.

MCMP 6906 Advanced Composition 3 s.h.

Individual instruction in the composition of larger forms for chorus, orchestra, or chamber ensembles.

Prereq.: Permission of the instructor.

MUAC 6977 Philosophies of Music 3 s.h.

Development of advanced music scholarship skills through readings, analysis, and critique of some of the major ideas about music's value and place in society that have been advanced by scholars ranging from the ancient Greeks to contemporary music critics, performers, philosophers, educators, and psychologists. Course takes an interdisciplinary approach to developing the skills to articulate music advocacy arguments. One of three core required courses for all masters students.

MUED 5814 Selected Topics in Music Education 3 s.h.

This course will examine some of the major ideas about the value of music education that have been advanced by music education scholars and others, ranging from the ancient Greeks to contemporary philosophers and psychologists. May be repeated for credit with different topics. **Prereq.:** MUED 4823 or MUED 4825 or permission of instructor.

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 5841C CE 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.

MUED 6950 Conducting Pedagogy 2 s.h.

The study and critical analysis of methods for teaching conducting. **Prereq.:** One semester of applied conducting study.

MUED 6960 Research in Music 3 s.h.

A study of research tools and methodologies as applied to music scholarship and bibliography. This course is intended to lay the foundation for the thesis or exit paper, and a final research project or project proposal is required. May include the study of historical, philosophical, qualitative, quantitative, and/ or analytic research methods, as deemed appropriate for students' areas of research.

Cross-Listed: MUHL 6960.

MUED 6970 Foundations of Music Education 3 s.h.

An examination of basic principles and techniques of music instruction; contemporary trends viewed from historical perspectives.

MUED 6972 Seminar in Music Education 3 s.h.

Individual projects and discussion of fundamental issues in music education. Course may be repeated once with permission of instructor.

MUED 6973 Research Methods and Materials in Music Education 3 s.h.

A study of research tools and techniques and their application to problems in music education; critique of research studies. Research report required in nonthesis music education program.

MUED 6974 Contemporary Curriculum Development 3 s.h.

This course builds understanding and skill in designing, developing, implementing, and evaluating music curriculum with special attention to culturally responsive approaches that value inclusivity and diverse musical practices. Topics include conceptual frameworks, planning processes, pedagogical approaches, teaching and learning tools, assessment, and creative strategies for incorporating non-traditional content and practices into existing programs.

MUED 6976 Directed Study in Conducting 3 s.h.

Study of significant works, vocal or instrumental; special problems in conducting. May be repeated for credit.

MUED 6977 Philosophies of Music 3 s.h.

Development of advanced music scholarship skills through readings, analysis, and critique of some of the major ideas about music's value and place in society that have been advanced by scholars ranging from the ancient Greeks to contemporary music critics, performers, philosophers, educators, and psychologists. Course takes an interdisciplinary approach to developing the skills to articulate music advocacy arguments. One of three core required courses for all masters students.

MUED 6978 Contemporary Trends in Music Education 3 s.h.

Examination and discussion of music education in contemporary society. Consideration of repertoire, methods, and teaching aids with regard to current needs and emerging trends.

MUED 6979 Workshop in Music Education 1-3 s.h.

For students and teachers in service. Specific topics are announced each time the workshop is offered. Grading is satisfactory or unsatisfactory (S/U). May be repeated with different topic.

MUED 6992 Independent Projects in Music 1-4 s.h.

Individual research topics in music of a library, laboratory, or fieldwork nature. **Prereq.:** Approval of Dana Graduate Committee.

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 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.

MUHL 6943 Seminar in Musicology 3 s.h.

An examination of select problems in musicology. May be repeated with permission of instructor.

MUHL 6946 Selected Topics in Jazz History 3 s.h.

Topical studies will develop a historical perspective of a specific period of jazz or a specific jazz artist including related cultures, events, and the development of musical style. Sample topics: early jazz, the Post-Bop Era, the music of John Coltrane. May be repeated with a different topic.

MUHL 6960 Research in Music 3 s.h.

A study of research tools and methodologies as applied to music scholarship and bibliography. This course is intended to lay the foundation for the thesis or exit paper, and a final research project or project proposal is required. May include the study of historical, philosophical, qualitative, quantitative, and/ or analytic research methods, as deemed appropriate for students' areas of research.

Cross-Listed: MUED 6960.

MUHL 6977 Philosophies of Music 3 s.h.

Development of advanced music scholarship skills through readings, analysis, and critique of some of the major ideas about music's value and place in society that have been advanced by scholars ranging from the ancient Greeks to contemporary music critics, performers, philosophers, educators, and psychologists. Course takes an interdisciplinary approach to developing the skills to articulate music advocacy arguments. One of three core required courses for all masters students.

MUHL 6980 Music and Society 3 s.h.

The course is a critical exploration of a select historical, ethnographic, sociological or theoretical topic in music that has contemporary relevance. Topics may vary, drawing on the strengths and research interests of the faculty.

MUHL 6990 Thesis 1 3 s.h.

Individual research and writing culminating in the preparation of a master's thesis.

Prereq.: Completion of 15 semester hours coursework.

MUHL 6991 Thesis 2 1-3 s.h.

Individual research and writing culminating in the preparation of a master's thesis.

Prereq.: Completion of MUHL 6990 and approval of thesis proposal by the Dana Graduate Committee.

MUIN 5878 Special Topics in Music Industry 3 s.h.

Topics in music industry and recording arts not covered in regular upperdivision offerings. Topics may include event planning, copyright law and music publishing, grant writing and fundraising. May be repeated once with a different topic.

Prereq.: Junior or senior standing.

MUIN 5878A Special Topics in Music Industry: Music Entrepreneurship 3 s.h.

Topics in music industry and recording arts not covered in regular upperdivision offerings. Topics may include event planning, copyright law and music publishing, grant writing and fundraising. May be repeated once with a different topic.

Prereq.: Junior or senior standing.

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 voice. 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 voice. 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 5828 Music Technology 3 s.h.

An exploration of the use of computers and technology in music. Applications related to composition, performance, analysis, teaching, and research. Prereq.: MUTC 2632 with grade of "C" or better or permission of instructor.

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.

MUTC 5831 Modal Counterpoint 3 s.h.

Sixteenth century contrapuntal style including introduction of species technique; analysis of liturgical and secular repertoire; writing of imitative 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 noncomposition 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.

MUTC 6903 Advanced Composition 3 s.h.

Individual instruction in the composition of larger forms for chorus, orchestra, or chamber ensembles.

Prereg .: Permission of Instructor.

MUTC 6904 Advanced Composition 3 s.h.

Individual instruction in the composition of larger forms for chorus, orchestra, or chamber ensembles.

Prereq .: Permission of instructor.

MUTC 6913 Pedagogy of Theory 3 s.h.

The study and critical analysis of methods for teaching harmony, sightsinging, and ear training.

MUTC 6916 Fugue 3 s.h.

Analysis of the fugal style used in 17th-century trio sonatas and in both volumes of The Well-Tempered Clavier by J. S. Bach; writing three to four voice fugues employing imitative and invertible counterpoint.

MUTC 6921 Graduate Analysis 1 3 s.h.

Foundational graduate study of musical analysis. Includes basic techniques of harmonic, melodic, and rhythmic analysis applied to a selection of music literature from the seventeenth century through the present time.

MUTC 6922 Graduate Analysis 3 s.h.

A graduate study of musical analysis. Topics may include Schenker, Riemann, set theory, twelve-tone theory, analysis of jazz improvisation, analysis of jazz composition, and analysis of jazz arranging techniques.

MUTC 6930 Baroque Music Styles 3 s.h.

Stylistic and structural analysis of compositions from the Baroque Era.

MUTC 6931 Classic Music Styles 3 s.h.

Stylistic and structural analysis of compositions from the Classic Era.

MUTC 6932 Romantic Music Styles 3 s.h.

Stylistic and structural analysis of compositions from the Romantic Era.

MUTC 6933 Twentieth-Century Music Styles 3 s.h.

Stylistic and structural analysis of compositions from the 20th century.

MUTC 6935 Jazz Theory 3 s.h.

This course examines the process of jazz improvisation and undertakes a critical evaluation of the existing modes of analyzing improvisation. Students will learn to differentiate between pedagogical, speculative, and analytical theory and to apply appropriate analytical techniques according to the musical context. Emphasis will be placed on the development of critical listening and reading skills.

MUTC 6936 Jazz Composition 3 s.h.

Students will study the styles of leading jazz composers and arrangers in the process of developing their craft and their own style. Assignments will include a portfolio of compositions and analysis of compositions by Jelly Roll Morton, Duke Ellington, Thad Jones, and others.

OBOE 5800A Oboe 1 s.h. Private Music Lessons.

OBOE 5800B Oboe 1 s.h. Private Music Lessons.

OBOE 6901 Oboe 2 s.h. Private Music Lessons.

OBOE 6902 Oboe 2 s.h. Private Music Lessons.

OBOE 6903 Oboe 3 s.h. Private Music Lessons.

OBOE 6904 Oboe 3 s.h. Private Music Lessons.

OBOE 6905 Oboe 4 s.h. Private Music Lessons.

OBOE 6906 Oboe 4 s.h. Private Music Lessons.

PERC 5800A Percussion 1 s.h. Private Music Lessons.

PERC 5800B Percussion 1 s.h. Private Music Lessons

PERC 6901 Percussion 2 s.h. Private Music Lessons.

PERC 6902 Percussion 2 s.h. Private Music Lessons.

PERC 6903 Percussion 3 s.h. Private Music Lessons.

PERC 6904 Percussion 3 s.h. Private Music Lessons.
PERC 6905 Percussion 4 s.h. Private Music Lessons.
PERC 6906 Percussion 4 s.h. Private Music Lessons.
PIAN 5800A Piano 1 s.h. Private Music Lessons.
PIAN 5800B Piano 1 s.h. Private Music Lessons.
PIAN 6901 Piano 2 s.h. Private Music Lessons.
PIAN 6902 Piano 2 s.h. Private Music Lessons.
PIAN 6903 Piano 3 s.h. Private Music Lessons.
PIAN 6904 Piano 3 s.h. Private Music Lessons.
PIAN 6905 Piano 4 s.h. Private Music Lessons.
PIAN 6906 Piano 4 s.h. Private Music Lessons.
SAX 5800A Saxophone 1 s.h. Private Music Lessons.
SAX 5800B Saxophone 1 s.h. Private Music Lessons.
SAX 6901 Saxophone 2 s.h. Private Music Lessons.
SAX 6902 Saxophone 2 s.h. Private Music Lessons.
SAX 6903 Saxophone 3 s.h. Private Music Lessons.
SAX 6904 Saxophone 3 s.h. Private Music Lessons.
SAX 6905 Saxophone 4 s.h. Private Music Lessons.
SAX 6906 Saxophone 4 s.h. Private Music Lessons.
SBSS 5800A String Bass 1 s.h. Private Music Lessons.
SBSS 5800B String Bass 1 s.h. Private Music Lessons.
SBSS 6901 String Bass 2 s.h. Private Music Lessons.
SBSS 6902 String Bass 2 s.h. Private Music Lessons.
SBSS 6903 String Bass 3 s.h. Private Music Lessons.
SBSS 6904 String Bass 3 s.h. Private Music Lessons.
SBSS 6905 String Bass 4 s.h. Private Music Lessons.
SBSS 6906 String Bass 4 s.h. Private Music Lessons.
TROM 5800A Trombone 1 s.h. Private Music Lessons.

TROM 5800BTrombone1 s.h.Private Music Lessons.TROM 6901Trombone2 s.h.Private Music Lessons.TROM 6902Trombone2 s.h.Private Music Lessons.2 s.h.Private Music Lessons.3 s.h.Private Music Lessons.4 s.h.Private Music Lessons.1 s.h.Private Music Lessons.3 s.h.Private Music Lessons.1 s.h.Private Music Lessons.3 s.h.Private Music Lessons.1 s.h.Private Music Lessons.3 s.h.Private Music Lessons.1 s.h.Private Music Less
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Private Music Lessons.TRUM 5800BTrumpet1 s.h.Private Music Lessons.2 s.h.Private Music Lessons.2 s.h.Private Music Lessons.2 s.h.Private Music Lessons.3 s.h.Private Music Lessons.4 s.h.
Private Music Lessons.TRUM 6901Trumpet2 s.h.Private Music Lessons.2 s.h.Private Music Lessons.2 s.h.TRUM 6903Trumpet3 s.h.Private Music Lessons.3 s.h.Private Music Lessons.3 s.h.Private Music Lessons.3 s.h.Private Music Lessons.4 s.h.
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TRUM 6906 Trumpet 4 s.h. Private Music Lessons.
TUBA 5800A Tuba 1 s.h. Private Music Lessons.
TUBA 5800B Tuba 1 s.h. Private Music Lessons.
TUBA 6901 Tuba 2 s.h. Private Music Lessons.
TUBA 6902 Tuba 2 s.h.
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TUBA 6904 Tuba 3 s.h. Private Music Lessons.
TUBA 6905 Tuba 4 s.h. Private Music Lessons.
TUBA 6906 Tuba 4 s.h. Private Music Lessons.
VIOL 5800A Viola 1 s.h. Private Music Lessons.
VIOL 5800B Viola 1 s.h. Private Music Lessons.
VIOL 6901 Viola 2 s.h. Private Music Lessons.

VIOL 6902 Viola 2 s.h. Private Music Lessons.

VIOL 6903 Viola 3 s.h. Private Music Lessons. VIOL 6904 Viola 3 s.h. Private Music Lessons.

VIOL 6905 Viola 4 s.h. Private Music Lessons.

VIOL 6906 Viola 4 s.h. Private Music Lessons.

VION 5800A Violin 1 s.h. Private Music Lessons.

VION 5800B Violin 1 s.h. Private Music Lessons.

VION 6901 Violin 2 s.h. Private Music Lessons.

VION 6902 Violin 2 s.h. Private Music Lessons.

VION 6903 Violin 3 s.h. Private Music Lessons.

VION 6904 Violin 3 s.h. Private Music Lessons.

VION 6905 Violin 4 s.h. Private Music Lessons.

VION 6906 Violin 4 s.h. Private Music Lessons.

VOIC 5800A Voice 1 s.h. Private Music Lessons.

VOIC 5800B Voice 1 s.h. Private Music Lessons.

VOIC 6901 Voice 2 s.h. Private Music Lessons.

VOIC 6902 Voice 2 s.h. Private Music Lessons.

VOIC 6903 Voice 3 s.h. Private Music Lessons.

VOIC 6904 Voice 3 s.h. Private Music Lessons.

VOIC 6905 Voice 4 s.h. Private Music Lessons

VOIC 6906 Voice 4 s.h. Private Music Lessons.

Master of Music in Music Education

Program Director Dr. J. Paul Louth (https://ysu.edu/ people/paul-louth/), Ph.D. Professor Bliss Hall 3149 330.941.1829 jplouth@ysu.edu

Program Description Teach While You Learn - Flexible Completion Options

The 100% Online Master of Music in Music Education (https:// academics.ysu.edu/cliffe-college-of-creative-arts/master-of-musicmusiceducation/) (M.M.E.) is designed specifically for busy music educators. Maximum flexibility for completion allows you to continue teaching while you further your knowledge of current strategies that you can integrate immediately to enhance student engagement in your classrooms. In addition, music educators may accumulate credits and credentials to maintain state teaching licensures and earn an increase in pay rank (if applicable in their state). The degree may be completed within one year or as students' schedules allow them to enroll in courses. Our highly flexible and relevant M.M.E. is the perfect degree for the 21 st-century music educator.

Intended for music educators at the beginning and middle stages of their careers, the skills honed throughout the degree may be readily applied either to the immediate improvement of practical skills or further graduate work. Our graduates (https://academics.ysu.edu/cliffe-college-of-creative-arts/alumni-giving/) hold positions in public and private education at all levels, including leadership roles throughout academia.

The design of the Online Master of Music in Music Education is flexible enough to help students reach their professional goals while they continue their teaching careers.

Contact Information

To learn more about our degree programs, audition information, Graduate Assistantships and Fellowships (https://ysu.edu/academics/collegegraduate-studies/assistantships-and-fellowships/), careers (https://ysu.edu/ academics/cliffe-college-creative-arts/dana-school-of-music/careers/), performances, faculty, and students, visit Dana School of Music (https:// ysu.edu/academics/cliffe-college-creative-arts/dana-school-of-music/) or contact us at 330.941.3636.

To schedule a personalized campus visit, contact the Cliffe College of Creative Arts (https://academics.ysu.edu/cliffe-college-of-creativearts/) Program Coordinator of Admissions and Recruitment at 330.941.2346 or sawaltman@ysu.edu. We would love to learn about your interests, talk with you about our programs, and become an important part of your future. Graduate Faculty Joseph W. Carucci (https:// academics.ysu.edu/cliffe-collegeof-creative-arts/leadershipadministration/joseph-carucci/), D.M.A.

Director and Professor Dana School of Music (https:// ysu.edu/academics/cliffe-collegecreative-arts/dana-school-of-music/) and University Theatre (https:// ysu.edu/ccca/university-theatre/) Bliss Hall 3010 330.941.1439 jwcarucci@ysu.edu

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Bryan Helsel (https://ysu.edu/people/bryan-helsel/), Ph.D. Lecturer Bliss Hall 3035 330 941 3639

330.941.3639 bhelsel@ysu.edu

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J. Paul Louth (https://ysu.edu/people/paul-louth/), Ph.D. Professor Bliss Hall 3149 330.941.1829 jplouth@ysu.edu

Admission Requirements

- NO Entrance Exams and NO Auditions
- Applicants for admission to graduate study in the Master of Music Education degree must have completed a baccalaureate degree in music from an accredited college or university.
- A cumulative undergraduate grade point average of at least 2.7 (on a 4.0 scale) is required.

Contact Information

To learn more about our degree programs, audition information, Graduate Assistantships and Fellowships (https://ysu.edu/academics/collegegraduate-studies/assistantships-and-fellowships/), careers (https://ysu.edu/ academics/cliffe-college-creative-arts/dana-school-of-music/careers/), performances, faculty, and students, visit Dana School of Music (https:// ysu.edu/academics/cliffe-college-creative-arts/dana-school-of-music/) or contact us at 330.941.3636.

To schedule a personalized campus visit, contact the Cliffe College of Creative Arts (https://academics.ysu.edu/cliffe-college-of-creativearts/) Program Coordinator of Admissions and Recruitment at 330.941.2346 or sawaltman@ysu.edu. We would love to learn about your interests, talk with you about our programs, and become an important part of your future.

Degree Requirements

- Successful completion of 30 semester hours and all requirements specific to each degree.
- Students in Music Education will take core courses in Music and Society (MUHL 6980), Graduate Analysis (MUTC 6922), and Research in Music (6960).
- Students must maintain a minimum grade-point average of at least 3.0 (on a 4.0 scale) to remain in "good standing." Any course grade of D or F must be repeated and passed with a grade of A or B and no more than 6 semester hours of coursework with a grade of C may count toward the minimum graduation hour requirements.

COURSE	TITLE	S.H.
Core Requirements	3	9
MUTC 6922	Graduate Analysis	
MUED 6960	Research in Music	
MUHL 6980	Music and Society	
Seminars in area		12
Seminars outside o	of area	9
Total Semester Ho	urs	30
COURSE	TITLE	S.H.
		5.н.
Seminars in area (s	select a total of 12 S.H. from the following)	
MUED 5814	Selected Topics in Music Education	
MUED 5841	Music Workshop	
MUED 6970	Foundations of Music Education	
MUED 6972	Seminar in Music Education	
MUED 6973	Research Methods and Materials in Music Education	
MUED 6974	Contemporary Curriculum Development	
MUED 6978	Contemporary Trends in Music Education	
MUED 6979	Workshop in Music Education	
Seminars outside o	of area (select a total of 9 S.H. from the following)	
	de of area may include music applied classes,	
ensembles or th	esis.	
MUTC 6913	Pedagogy of Theory	
MUED 5880	Vocal Pedagogy	

MUED 5880	Vocal Pedagogy
MUED 5858	Piano Pedagogy
MUED 6950	Conducting Pedagogy
MUTC 5833	Theory Seminar
MUTC 6935	Jazz Theory
MUTC 6936	Jazz Composition
MUHL 6943	Seminar in Musicology
MUHL 6946	Selected Topics in Jazz History

Independent Projects in Music

MUED 6992

Learning Outcomes

- Students will demonstrate the ability to analyze and work critically with historical information (MUHL). Assessment: MUHL coursebased project.
- Students will demonstrate an understanding of specialized knowledge of at least one aspect of Music Theory (MUTC). Assessment: Final exam in 6922 Graduate Analysis II.
- Students will demonstrate the ability to write in a scholarly manner about their area of specialization within music. Assessment: FINAL PROJECT IN MUED 6973

Master of Music in Music Performance

Program Director

Joseph Carucci (https://academics.ysu.edu/cliffe-college-of-creative-arts/ leadership-administration/joseph-carucci/), D.M.A. Director and Professor

Dana School of Music (https://ysu.edu/academics/cliffe-college-creativearts/dana-school-of-music/) and University Theatre (https://ysu.edu/ccca/ university-theatre/)

Bliss Hall 3010 1 Tressel Way Youngstown, OH 44555 330.941.1439 jwcarucci@ysu.edu

Program Description

The Master of Music (M.M.) in Music Performance in the Dana School of Music (https://ysu.edu/academics/cliffe-college-creative-arts/danaschool-of-music/) offers exceptional opportunities for solo and collaborative performance, scholarship, and pedagogy and also provides avenues for students to diversify their studies with elective courses and professional skills that are relevant to their area of focus. The intensive applied curriculum provides students with skills they will use throughout their professional careers (https://ysu.edu/academics/cliffe-college-creative-arts/dana-schoolof-music/careers/) and supports their development as artists and teachers who engage their audiences with authenticity—in live performances as well as via digital platforms.

M.M. students work closely with a world-class faculty (https://ysu.edu/ academics/cliffe-college-creative-arts/dana-school-of-music/faculty/) of performers, composers, and scholars. Through the development of strategic experiences, our faculty help our students further their unique aspirations, thus enabling them to pursue a variety of professional opportunities in multiple contexts. Students are encouraged to develop their own specialized interests, including involvement in competitions, festivals, or recordings; additional studies in pedagogy or collaborative performance; or focused repertoire studies in areas such as new music or music of underrepresented composers.

Our students regularly win regional, national, and international recognition in performance and garner competition awards. They routinely perform as artists, chamber musicians, and artist-faculty at summer music festivals in the U.S. and abroad. They are accepted to prestigious doctoral programs and have earned positions as academic faculty around the country and across the globe.

The M.M. in Music Performance prepares students with advanced training to develop careers (https://ysu.edu/academics/cliffe-college-creative-arts/ dana-school-of-music/careers/) in a myriad of fields. Our alumni (https:// academics.ysu.edu/cliffe-college-of-creative-arts/alumni-giving/) are Grammy® Award winning artists and may be found performing with national and international ensembles; recording in Hollywood studios; touring with

diverse acts; performing with the Jazz at Lincoln Center Orchestra; serving as award-winning producers, arrangers, and audio engineers; and teaching in various venues. Our degree helps students define their future professional goals and equips them with exceptional skills for successful careers.

Contact Information

To learn more about our degree programs, audition information, Graduate Assistantships and Fellowships (https://ysu.edu/academics/college-graduatestudies/assistantships-and-fellowships/), careers, performances, faculty, and students, visit Dana School of Music (https://ysu.edu/academics/cliffecollege-creative-arts/dana-school-of-music/) or contact us at 330.941.3636.

To schedule a personalized campus visit, contact the Cliffe College of Creative Arts (https://academics.ysu.edu/cliffe-college-of-creativearts/) Program Coordinator of Admissions and Recruitment at 330.941.2346 or sawaltman@ysu.edu. We would love to learn about your interests, talk with you about our programs, and become an important part of your future.

Graduate Faculty Brass Van Parker, *Horn* Bliss Hall 3023 330.941.3635

Dr. Christopher Krummel (https:// ysu.edu/people/christopherkrummel/), *Trumpet* Bliss Hall 1248 330.941.1838 clkrummel@ysu.edu

Dr. Andrew Mitchell (https://ysu.edu/ people/andrew-mitchell/), *Trombone* Bliss Hall 3053 330.941.1842

amitchell02@ysu.edu (amitchell02@ysu.ed@ysu.edu)

Dr. Yukitada Onitsuka (https:// ysu.edu/academics/cliffe-collegecreative-arts/dana-school-of-music/ faculty/),*Tuba/Euphonium* Bliss Hall 3146 330.941.3634 yonitsuka@ysu.edu Percussion Dr. Glenn Schaft (https://ysu.edu/ people/glenn-schaft/) Bliss Hall 2234 330.941.2643 geschaft@ysu.edu

Piano

Caroline Oltmanns (https://ysu.edu/people/caroline-oltmanns/), D.M.A. Bliss Hall 1240 330.941.1826 cmoltmanns@ysu.edu

Strings Dr. François Fowler (https://ysu.edu/ people/francois-fowler/), *Guitar*

Bliss Hall 3043 330.941.3479 fpfowler@ysu.edu

Dr. David Morgan (https://ysu.edu/people/dave-morgan/), String Bass Bliss Hall 3041 330.941.1930 dsmorgan@vsu.edu

Woodwinds

Dr. Christine Carucci (https:// ysu.edu/academics/cliffe-collegecreative-arts/dana-school-of-music/ faculty/), *Bassoon* Bliss Hall 3077 330.941.3635 cacarucci@ysu.edu 330.941.3646 srreynolds@ysu.edu

Dr. James Umble (https://ysu.edu/people/james-umble/), Saxophone Bliss Hall 3033 330.941.1828 jcumble@ysu.edu

Dr. Alice Wang (https://ysu.edu/people/alice-wang/), Clarinet Bliss Hall 3049 330.941.1827 amwang@ysu.edu

Voice

Misook Yun (https://ysu.edu/people/misook-yun/), D.M.A. Professor Bliss Hall 3159 330.941.3644 myun@ysu.edu

Admission Requirements

- Applicants for admission to graduate study in the Master of Music in Music Performance degree must have completed a baccalaureate degree in music from an accredited college or university.
- Admission requires a cumulative undergraduate grade point average of at least 2.7 (on a 4.0 scale).
- An audition (https://ysu.edu/academics/cliffe-college-creative-arts/danaschool-of-music/admission/) is required for admittance to all performance degrees.

Contact Information

To learn more about our degree programs, audition information, Graduate Assistantships and Fellowships (https://ysu.edu/academics/collegegraduate-studies/assistantships-and-fellowships/), careers (https://ysu.edu/ academics/cliffe-college-creative-arts/dana-school-of-music/careers/), performances, faculty, and students, visit Dana School of Music (https:// ysu.edu/academics/cliffe-college-creative-arts/dana-school-of-music/) or contact us at 330.941.3636.

To schedule a personalized campus visit, contact the Cliffe College of Creative Arts (https://academics.ysu.edu/cliffe-college-of-creativearts/) Program Coordinator of Admissions and Recruitment at 330.941.2346 or sawaltman@ysu.edu. We would love to learn about your interests, talk with you about our programs, and become an important part of your future.

Degree Requirements

- Successful completion of 30 semester hours and all requirements specific to each degree.
- Students in Performance will take core courses in Music and Society (6980), Graduate Analysis (6922), and Research in Music (6960). These courses are offered in an online asynchronous format to accommodate the online Music Education students.
- In performance degrees, students will also take applied lessons, ensembles, and seminar electives. Performance degrees will culminate in a recital of 50 minutes of music. Candidates in Voice Performance are expected to be proficient in two foreign languages or else take two semesters each of two different languages (Italian, French, or German).
- Students must maintain a minimum grade-point average of at least 3.0 (on a 4.0 scale) to remain in "good standing." Any course grade of D or F must be repeated and passed with a grade of A or B and no more than 6 semester hours of coursework with a grade of C may count toward the minimum graduation hour requirements.

COURSE	TITLE	S.H.
Core Requiremer	nts	9
MUTC 6922	Graduate Analysis	
MUHL 6960	Research in Music	
MUHL 6980	Music and Society	
Applied Lessons		12
Seminar Elective		3
Ensembles		6
Total Semester H	lours	30
COURSE	TITLE	S.H.
Applied Lessons	(12 s.h.)	12
Cello (CELL), ((GUIT), Oboe ((SAX), String I	ns are offered on: Bassoon (BASS), Baritone Horn (BHFN Clarinet (CLAR), Flute (FLUT), French Horn (FHRN), Guita (OBOE), Percussion (PERC), Piano (PIAN), Saxophone Bass (SBSS), Trombone (TROM), Trumpet (TRUM), Tuba, /iolin (VION), Voice (VOIC), as well as in Conducting	
6901		
6902		
6905		
6906		
	s (select a total of 3 S.H. of the following)	3
MUTC 5833	Theory Seminar	
MUTC 6913	Pedagogy of Theory	
MUTC 6935	Jazz Theory	
MUTC 6936	Jazz Composition	
MUHL 6943	Seminar in Musicology	
MUHL 6946	Selected Topics in Jazz History	
MUED 6992	Independent Projects in Music	
•	ct a total of 6 S.H. of the following)	6
MUEN 0002	Dana Chorale	
MUEN 0004	University Chorus	
MUEN 0005	Concert Band	
MUEN 0007	Wind Ensemble	
MUEN 0008	Symphony Orchestra	
MUEN 0009	Percussion Ensemble	
MUEN 0010	String Ensemble	
MUEN 0011	Men's Chorus	
MUEN 0012	Dana Opera Ensemble	
MUEN 0013	Contemporary Ensemble	
MUEN 0014	Women's Chorus	
MUEN 0015	Early Music Ensemble	
MUEN 0016	Woodwind Ensemble	
MUEN 0018	Horn Choir	
MUEN 0019	Trombone Ensemble	
MUEN 0020	Tuba Ensemble	
MUEN 0022	Trumpet Ensemble	
MUEN 0023	Jazz Ensemble	
MUEN 0024	Composer's Ensemble	
MUEN 0025	Gospel Choir	
MUEN 0026	Chamber Orchestra	
MUEN 0028	Chamber Winds	
MUEN 0029	Guitar Ensemble	
MUEN 0030	Jazz Combo	
MUEN 0031	Chamber Music	

MUEN 0035	Saxophone Quartet
MUEN 0051	Piano Chamber

Learning Outcomes

- 1. Students will demonstrate the ability to analyze and work critically with historical information (MUHL). Assessment: MUHL course-based project
- 2. Students will demonstrate an understanding of specialized knowledge of at least one aspect of Music Theory (MUTC). Assessment: Final exam in 6922 Graduate Analysis II
- Students will demonstrate the ability to write in a scholarly manner about their area of specialization within music. Assessment: Final Project in 6960 Research in Music
- 4. Students will demonstrate proficiency in their applied area. Assessment: Second year RECITAL of 50 minutes of music.

Master of Music in Music Composition

Overview

Admission to the Master of Music in Music Composition has been suspended. Program Director Dr. Joseph Carucci Bliss Hall 3010 jwcarucci@ysu.edu (330) 941-1439 Program Description

The Master of Music (M.M.) in Composition offers exceptional individualized instruction that focuses on the professional development and unique career goals of each student. Students work closely with the Composition faculty to develop skills they will use throughout their professional careers and that support their development as artists who communicate with their audiences with authenticity. They have the opportunity to take classes in music technology, music industry, and recording to ensure that they are prepared for the variety of media in which contemporary composers work (e.g., concert stage, film, musical theatre, video games, advertising, internet, arranging, orchestration, etc.). They also have numerous chances to have their music performed, compose for marquee ensembles (e.g., Dana Chorale, Jazz Ensemble, Wind Ensemble), and premiere their works in venues throughout the region.

M.M. in Composition students work closely with a world-class faculty of performers, composers, and scholars who hold advanced degrees from some of the world's finest institutions, including: Juilliard, Cincinnati Conservatory, Eastman, Cleveland Institute of Music, New England Conservatory, University of Southern California, Florida State University, and the University of Texas. Our faculty work with students to support their unique aspirations through the development of strategic experiences, thus enabling them to pursue a variety of professional opportunities in multiple contexts.

The M.M. in Composition prepares students with advanced training to develop careers in a myriad of fields. Our alumni are Grammy®Award winning composers, arrangers, and audio engineers and may be found recording in Hollywood and Nashville studios; touring with diverse acts; and working as

academic faculty. Our degree helps students define future professional goals and equips them with exceptional skills for a successful career.

Admission to the Master of Music in Music Composition has been suspended. *Admission Requirements*

- Applicants for admission to graduate study in the Master of Music degree must present a baccalaureate degree in music from an accredited college or university. Admission requires a cumulative undergraduate grade point average of at least 2.7 (on a 4.0 scale).
- Evidence of analytical activities, or the sound files and scores for three original compositions are required for admission to the Music Composition degree program.

Degree Requirements Admission to the Master of Music in Music Composition has been suspended.

- Successful completion of 30 semester hours and all requirements specific to each degree.
- Students will take core courses in Music and Society (6980), Graduate Analysis (6922), and Research in Music (6960), 12 s.h. of advanced composition lessons and 9 s.h. of seminar electives.
- Students must maintain a minimum grade-point average of at least 3.0 (on a 4.0 scale) to remain in "good standing." Any course grade of D or F must be repeated and passed with a grade of A or B and no more than 6 semester hours of coursework with a grade of C may count toward the minimum graduation hour requirements.

COURSE	TITLE	S.H.
Core Requirements	s ¹	9
MUTC 6922	Graduate Analysis	
MUHL 6960	Research in Music	
MUHL 6980	Music and Society	
Applied Composition Lesson Requirements		
MCMP 6903	Advanced Composition	3
MCMP 6904	Advanced Composition	3
MCMP 6905	Advanced Composition	3
MCMP 6906	Advanced Composition	3
Seminar Electives		9
Total Semester Hours		30
COURCE		сu

С	OURSE	TITLE	S.H.
S	(select a total of 9 S.H. of the following)	9	
	MUTC 6913	Pedagogy of Theory	
	MUTC 6903	Advanced Composition	
	MUHL 6943	Seminar in Musicology	
	MUHL 6946	Selected Topics in Jazz History	
	MUED 6992	Independent Projects in Music	
	MUTC 5833	Theory Seminar	

Admission to the Master of Music in Music Composition has been suspended. Learning Outcomes

1. Students will demonstrate the ability to analyze and work critically with historical information (MUHL). Assessment: MUHL course-based project

2. Students will demonstrate an understanding of specialized knowledge of at least one aspect of Music Theory (MUTC). Assessment: Final exam in MUTC 6922 Graduate Analysis II

3. Students will demonstrate the ability to write in a scholarly manner about their area of specialization within music. Assessment: Project MUHL 6960 Research in Music

4. Students will demonstrate research skills and techniques through the creation of an original scholarly project. Assessment: Thesis

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 voice. 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 voice. 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 5828 Music Technology 3 s.h.

An exploration of the use of computers and technology in music. Applications related to composition, performance, analysis, teaching, and research. **Prereq.:** MUTC 2632 with grade of "C" or better or permission of instructor.

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.

MUTC 5831 Modal Counterpoint 3 s.h.

Sixteenth century contrapuntal style including introduction of species technique; analysis of liturgical and secular repertoire; writing of imitative 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 noncomposition 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.

MUTC 6903 Advanced Composition 3 s.h.

Individual instruction in the composition of larger forms for chorus, orchestra, or chamber ensembles.

Prereq.: Permission of Instructor.

MUTC 6904 Advanced Composition 3 s.h.

Individual instruction in the composition of larger forms for chorus, orchestra, or chamber ensembles.

Prereq.: Permission of instructor.

MUTC 6913 Pedagogy of Theory 3 s.h.

The study and critical analysis of methods for teaching harmony, sightsinging, and ear training.

MUTC 6916 Fugue 3 s.h.

Analysis of the fugal style used in 17th-century trio sonatas and in both volumes of The Well-Tempered Clavier by J. S. Bach; writing three to four voice fugues employing imitative and invertible counterpoint.

MUTC 6921 Graduate Analysis 1 3 s.h.

Foundational graduate study of musical analysis. Includes basic techniques of harmonic, melodic, and rhythmic analysis applied to a selection of music literature from the seventeenth century through the present time.

MUTC 6922 Graduate Analysis 3 s.h.

A graduate study of musical analysis. Topics may include Schenker, Riemann, set theory, twelve-tone theory, analysis of jazz improvisation, analysis of jazz composition, and analysis of jazz arranging techniques.

MUTC 6930 Baroque Music Styles 3 s.h.

Stylistic and structural analysis of compositions from the Baroque Era.

MUTC 6931 Classic Music Styles 3 s.h.

Stylistic and structural analysis of compositions from the Classic Era.

MUTC 6932 Romantic Music Styles 3 s.h.

Stylistic and structural analysis of compositions from the Romantic Era.

MUTC 6933 Twentieth-Century Music Styles 3 s.h.

Stylistic and structural analysis of compositions from the 20th century.

MUTC 6935 Jazz Theory 3 s.h.

This course examines the process of jazz improvisation and undertakes a critical evaluation of the existing modes of analyzing improvisation. Students will learn to differentiate between pedagogical, speculative, and analytical theory and to apply appropriate analytical techniques according to the musical context. Emphasis will be placed on the development of critical listening and reading skills.

MUTC 6936 Jazz Composition 3 s.h.

Students will study the styles of leading jazz composers and arrangers in the process of developing their craft and their own style. Assignments will include a portfolio of compositions and analysis of compositions by Jelly Roll Morton, Duke Ellington, Thad Jones, and others.

Master of Music in Jazz Studies

Admission to the Master of Music in Jazz Studies has been suspended. Please the following link for other graduate programs: https://catalog.ysu.edu/ program Director Dr. Joseph Carucci Bliss Hall 3010 jwcarucci@ysu.edu (330) 941-1439 Program Description

The Master of Music (M.M.) in Jazz Studies degree emphasizes collaborative interaction, individual creativity, musical proficiency, pedagogy, and cultural perspectives through a unique and comprehensive curriculum.

Collaboration is encouraged and realized through a balanced approach between small and large jazz and commercial ensemble experiences. Both applied instrument and composition study provide the students a guided opportunity to build their individual creativity. In addition, historical and cultural perspectives, as well as research skills, are addressed in the curriculum. The First Year Recital and the Second Year Recital are the capstone experiences of the degree. Students are expected to perform and improvise music which includes original compositions and/or arrangements. Students are encouraged to record studio and live performances for inclusion in a portfolio or publication on the internet.

Our M.M. in Jazz Studies graduates have performed with the U.S. Navy Commodores Jazz Band, Lincoln Center Jazz Orchestra, Buddy Rich, Tommy Dorsey, Harry Connick Jr., Glenn Miller, Néstor Torres, Joe Lovano, Christine McBride, Lionel Hampton, Art Blakey, Chuck Mangione, Blood, Sweat, & Tears, The Eagles, Max Weinberg, Barry Manilow, and many more.

Admission to the Master of Music in Jazz Studies has been suspended. *Admission Requirements*

- Applicants for admission to graduate study in the Master of Music degree must present a baccalaureate degree in music from an accredited college or university. Admission requires a cumulative undergraduate grade point average of at least 2.7 (on a 4.0 scale).
- Jazz Studies requires an audition as well as examples of original compositions and arrangements.

Admission to the Master of Music in Jazz Studies has been suspended. Learning Outcomes

1. Students will demonstrate the ability to analyze and work critically with historical information (MUHL). Assessment: MUHL 6946 course-based project

- Students will demonstrate an understanding of specialized knowledge of at least one aspect of Music Theory (MUTC). Assessment: Final exam in MUTC 6936 or MUTC 6935
- Students will demonstrate the ability to write in a scholarly manner about their area of specialization within music. Assessment: Final Project in MUHL 6960
- 4. Students will demonstrate proficiency in their applied and composition areas. Assessment: First and second year RECITAL of 25 minutes and 50 minutes of music, respectively.

Admission to the Master of Music in Jazz Studies has been suspended.

- Successful completion of 30 semester hours and all requirements specific to each degree.
- Students in Performance, Music Composition, and Music Education will take core courses in Music and Society (6980), Graduate Analysis (6922), and Research in Music (6960).
- In performance degrees, students will also take applied lessons, ensembles, and two seminar electives. Performance degrees will culminate in a 50-minute recital. Candidates in Voice Performance are expected to be proficient in two foreign languages or else take two semesters each of two different languages (Italian, French, or German).
- · The degree requires two 50-minute recitals.
- Students must maintain a minimum grade-point average of at least 3.0 (on a 4.0 scale) to remain in "good standing." Any course grade of D or F must be repeated and passed with a grade of A or B and no more than 6 semester hours of coursework with a grade of C may count toward the minimum graduation hour requirements.

COURSE	TITLE	S.H.	
Core Requirements 12			
MUHL 6960	Research in Music		
MUHL 6946	Selected Topics in Jazz History		
MUTC 6922	Graduate Analysis		
MUHL 6980	Music and Society		
Applied Lessons		13	
Ensembles		5	
Total Semester Ho	ours	30	
COURSE	TITLE	S.H.	
Applied Lessons (select a total of 13 S.H. of the following)	13	
Applied lessons are offered on: Bassoon (BASS), Baritone Horn (BHFN), Cello (CELL), Clarinet (CLAR), Flute (FLUT), French Horn (FHRN), Guitar (GUIT), Oboe (OBOE), Percussion (PERC), Piano (PIAN), Saxophone (SAX), String Bass (SBSS), Trombone (TROM), Trumpet (TRUM), Tuba, Viola (VIOL), Violin (VION), Voice (VOIC). For example:			
PIAN 6901	Piano		
PIAN 6902	Piano		
PIAN 6903	Piano		
MCMP 6903	Advanced Composition		
MCMP 6904	Advanced Composition		
Ensembles (select	t a total of 5 S.H of the following)	5	
	Students should take two semesters each of MUEN 0023 and MUEN 0030; the last ensemble should be either MUEN 0023 or MUEN 0030		
MUEN 0023	Jazz Ensemble		
MUEN 0030	Jazz Combo		

Master of Public Health Program Directors

Dr. Nicolette Powe, YSU Program Coordinator 1104 Cushwa Hall (330) 941-1895 nwpowe@ysu.edu (ktrobinson@ysu.edu)

Dr. Amy Lee, CEOMPH Program Director Consortium of Eastern Ohio Master of Public Health NEOMED (330) 325-6179 afl@neomed.edu

Dr. Jeanine Mincher, Nutrition Graduate Program Director (330) 941-3346 jlmincher@ysu.edu (afl@neomed.edu)

Program Description

The Master of Public Health program at Youngstown State University is part of Consortium of Eastern Ohio Master of Public Health (CEOMPH). CEOMPH is a multidisciplinary, interdepartmental, and interinstitutional program that provides opportunities for graduate studies in public health. It is housed in the Bitonte College of Health and Human Services. Although the M.P.H. degree is awarded by Youngstown State University, the M.P.H. program is consortium-based. It draws its faculty from several departments at The University of Akron, Cleveland State University, the Northeastern Ohio Medical University (NEOMED), Ohio University, and Youngstown State University.

The mission of the Consortium of Eastern Ohio Master of Public Health program is to provide accredited public health education designed for the working professional. It does this through a collaborative learning community, drawing on the collective resources of its five member institutions and partnering community agencies. The program strives to produce respected and competent professionals able to improve public health practice, especially in eastern Ohio.

Students take core courses that are delivered through webinar and online teaching each semester.

Unique program features:

- Distance learning (webinar and online)
- · Elective courses at any partner university

4+ 1 Bachelor of Science in Applied Science/Master of Public Health Program

The accelerated "4+ 1 + program allows students to earn the Master of Public Health degree in one year after completing their Bachelor's degree. Undergraduate students can apply for admission into the accelerated program after completing 78 semester hours with a GPA of 3.3 or higher. While in the accelerated program, students must maintain a 3.0 GPA. Students can take a maximum of twelve semester hours of graduate work that can count both towards the Bachelor's degree and Master of Public Health degree.

Nutrition Specialization

Stakeholder interviews have noted the emergence of non-traditional practice settings and an expanding scope of practice expectation required of Registered Dietitian Nutritionists (RDNs). Primary areas of focus will be disease prevention and integrative healthcare. With these focus areas, there will be a need for professionals who have training and preparation in leadership, inter-professional practice and a greater understanding of

the community and cultural ecosystems of patients and clients. https://www.eatrightpro.org/

Future Model programs offered at the graduate level will provide the necessary coursework and supervised experiential learning to meet the competency based education requirements set forth by the accrediting body. Individuals completing the requirements are eligible to take the CDR RDN credentialing examination.

Admission Requirements

In addition to the minimum College of Graduate Studies admission requirements, applicants must hold a bachelor's degree from an accredited college or university, with a minimum GPA of 2.75. Applicants must have successfully completed a college-level mathematics or statistics course, and a college social science or natural science course. If the applicant has a GPA lower than 3.0, then an acceptable GRE scores within the last five years is also required.

GRE scores may be waived if the applicant has a professional degree (master's or doctorate) in a relevant area or a bachelor's degree from an accredited U.S. institution with a cumulative GPA of 3.0 or higher. Official results from other equivalent standardized tests used for graduate admissions, also taken within the last five years, may be substituted. These accepted tests are the following: DAT, GMAT, MCAT, and PCAT. Please use institution code #1903 in the designated area of your GRE application form. TOEFL is required from applicants from countries where English is not the language of instruction; the minimum score must be 550 (paper-based) or 213 (computer-based) or 79-80 with read/speak/listen=17, write=14 (Internet-based). Please use the institution code #1903 in the designated area on your TOEFL application form.

Two years of work experience in a relevant field is highly recommended. The applicant must provide contact information for two references familiar with the applicant's academic or professional background. If the applicant has not been involved in an academic institution for two years or more, references may be submitted by supervisors from his or her place of employment. Applicants should apply through the online portal system at Master of Public Health (https://www.neomed.edu/graduatestudies/mph/admissions/).

Graduate Faculty

Weiqing Ge, D.P.T., Ph.D., Professor

Biomechanics; manual therapy including complementary and integrative approaches; telehealth; cultural competence; scholarship in teaching

Nicolette Powe, Dr.P.H., Associate Professor

Health equality; chronic diseases; cancer prevention; healthy lifestyles

Degree Requirements

The curriculum consists of eight core courses, directed elective, required capstone project, and electives. In addition, a portfolio, and an exit presentation are required. Students should plan on taking the core courses as a cohort. Core courses will be offered on Saturdays, one course in the morning and one in the afternoon. Students may take core courses in any one of the distance learning classrooms at the partner universities. Distance learning will involve interactive electronic technology and web-based learning. Students may take electives at any time in the program, and may select an elective from any of the partner universities from a list of approved electives.

If the student is interested in an elective that is not on the approved list, an Elective Approval form must be submitted, along with the course syllabus, for review and approval by the CEOMPH Curriculum Committee:

CEOMPH Curriculum Committee Consortium of Eastern Ohio Master of Public Health NEOMED 4209 State Route 44 PO Box 95 Rootstown, Ohio 44272 Students will be assigned an advisor upon entering the program. The advisor will offer guidance on choosing electives appropriate to student career goals and interest. Students must maintain a minimum GPA of 3.0. The program requires 42 semester hours to comply with accreditation criteria.

COURSE Core Courses	TITLE	S.H.
MPH 6901	Public Health Concepts	3
MPH 6902	Social and Behavioral Sciences in Public Health	
MPH 6903	Epidemiology in Public Health	
MPH 6903	Biostatistics in Public Health	
MPH 6904	Health Services Administration in Public Health	
MPH 6905	Policy and Environmental Health Sciences in Public	
	Health	3
Generalist Track		
MPH 6907	Grant Writing in Public Health Practice	3
MPH 6908	Public Health Practice and Issues	3
MPH 6909	Public Health Research and Evaluation	3
Electives		
MPH 6994	Individual Investigation in Public Health	1-3
MPH 6996	MPH Practicum	3
Elective		3
Required Project		
MPH 6998	Capstone Project 1	3
MPH 6999	Capstone Project 2	3
Total Semester Ho	urs	42
Total Semester Ho COURSE	TITLE	42 S.H.
COURSE		
COURSE	TITLE	
COURSE Public Health Nutr	TITLE ition Requirements	S.H.
COURSE Public Health Nutr FNUT 6972	TITLE ition Requirements Maternal and Child Nutrition Clinical	S.H .
COURSE Public Health Nutr FNUT 6972 MPH 6901	TITLE ition Requirements Maternal and Child Nutrition Clinical Public Health Concepts	з.н. 3
COURSE Public Health Nutr FNUT 6972 MPH 6901 MPH 6905	TITLE ition Requirements Maternal and Child Nutrition Clinical Public Health Concepts Health Services Administration in Public Health Policy and Environmental Health Sciences in Public	S.H. 3 3 3
COURSE Public Health Nutr FNUT 6972 MPH 6901 MPH 6905 MPH 6906	TITLE ition Requirements Maternal and Child Nutrition Clinical Public Health Concepts Health Services Administration in Public Health Policy and Environmental Health Sciences in Public Health	S.H. 3 3 3 3
COURSE Public Health Nutr FNUT 6972 MPH 6901 MPH 6905 MPH 6906 MPH 6904	TITLE ition Requirements Maternal and Child Nutrition Clinical Public Health Concepts Health Services Administration in Public Health Policy and Environmental Health Sciences in Public Health Biostatistics in Public Health	S.H. 3 3 3 3 3
COURSE Public Health Nutr FNUT 6972 MPH 6901 MPH 6905 MPH 6906 MPH 6904 MPH 6902	TITLE ition Requirements Maternal and Child Nutrition Clinical Public Health Concepts Health Services Administration in Public Health Policy and Environmental Health Sciences in Public Health Biostatistics in Public Health Social and Behavioral Sciences in Public Health	S.H. 3 3 3 3 3 3 3 3
COURSE Public Health Nutr FNUT 6972 MPH 6901 MPH 6905 MPH 6906 MPH 6904 MPH 6902 MPH 6903	TITLE ition Requirements Maternal and Child Nutrition Clinical Public Health Concepts Health Services Administration in Public Health Policy and Environmental Health Sciences in Public Health Biostatistics in Public Health Social and Behavioral Sciences in Public Health Epidemiology in Public Health	S.H. 3 3 3 3 3 3 3 3 3 3
COURSE Public Health Nutr FNUT 6972 MPH 6901 MPH 6905 MPH 6906 MPH 6904 MPH 6902 MPH 6903 FNUT 6973	TITLE ition Requirements Maternal and Child Nutrition Clinical Public Health Concepts Health Services Administration in Public Health Policy and Environmental Health Sciences in Public Health Biostatistics in Public Health Social and Behavioral Sciences in Public Health Epidemiology in Public Health Nutrition and Aging Clinical	S.H. 3 3 3 3 3 3 3 3 3 3 3 3 3
COURSE Public Health Nutr FNUT 6972 MPH 6901 MPH 6905 MPH 6906 MPH 6904 MPH 6902 MPH 6903 FNUT 6973 FNUT 5825	TITLE ition Requirements Maternal and Child Nutrition Clinical Public Health Concepts Health Services Administration in Public Health Policy and Environmental Health Sciences in Public Health Biostatistics in Public Health Social and Behavioral Sciences in Public Health Epidemiology in Public Health Nutrition and Aging Clinical Current Nutrition Concepts	S.H. 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
COURSE Public Health Nutr FNUT 6972 MPH 6901 MPH 6905 MPH 6906 MPH 6904 MPH 6902 MPH 6903 FNUT 6973 FNUT 5825 HAHS 5875	TITLE ition Requirements Maternal and Child Nutrition Clinical Public Health Concepts Health Services Administration in Public Health Policy and Environmental Health Sciences in Public Health Biostatistics in Public Health Social and Behavioral Sciences in Public Health Epidemiology in Public Health Nutrition and Aging Clinical Current Nutrition Concepts Interprofessional Education for Health Professions	S.H. 3 3 3 3 3 3 3 3 3 3 3 3 4
COURSE Public Health Nutr FNUT 6972 MPH 6901 MPH 6905 MPH 6906 MPH 6904 MPH 6902 MPH 6903 FNUT 6973 FNUT 5825 HAHS 5875 FNUT 6985	TITLE ition Requirements Maternal and Child Nutrition Clinical Public Health Concepts Health Services Administration in Public Health Policy and Environmental Health Sciences in Public Health Biostatistics in Public Health Social and Behavioral Sciences in Public Health Epidemiology in Public Health Nutrition and Aging Clinical Current Nutrition Concepts Interprofessional Education for Health Professions Dietetics Clinical Experience	S.H. 3 3 3 3 3 3 3 3 3 3 3 3 4
COURSE Public Health Nutr FNUT 6972 MPH 6901 MPH 6905 MPH 6906 MPH 6902 MPH 6903 FNUT 6973 FNUT 5825 HAHS 5875 FNUT 6985 FNUT 6901	TITLE ition Requirements Maternal and Child Nutrition Clinical Public Health Concepts Health Services Administration in Public Health Policy and Environmental Health Sciences in Public Health Biostatistics in Public Health Social and Behavioral Sciences in Public Health Epidemiology in Public Health Nutrition and Aging Clinical Current Nutrition Concepts Interprofessional Education for Health Professions Dietetics Clinical Experience Advanced Nutrition Assessment (Advanced Nutrition)	S.H. 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3

Core Competencies

- Use basic techniques and statistical software to access, evaluate, and interpret health data.
- · Apply analytic reasoning and methods.
- Interpret scientific and statistical results, including the strengths and limitations of scientific articles.
- Explain characteristics, strengths and limitations of epidemiological study design types.
- Apply behavioral health theories/models in developing community health promotion and intervention programs, and applications for research funding.

- Apply principles of strategic planning to public health, including continuous quality improvement, leadership, teamwork, systems thinking, and social marketing.
- Assess associations found between environmental hazards and health outcomes to influence environmental policies designed to protect populations.
- Apply principles of program planning, development, implementation, management, and evaluation in organizational and community initiatives.
- Use collaborative strategies in the design of policies, interventions, and programs.
- Communicate public health information to lay and professional audiences, using appropriate channels and technologies and with linguistic and cultural proficiency.
- Demonstrate ability to use credible evidence and rationale to guide wellreasoned decisions, proposals, and attitudes.
- Use individual, team and organizational learning opportunities for personal and professional development.

Generalist Competencies

- Prepare proposals for funding from external sources.
- Demonstrate the ability to design, implement and execute a research protocol.
- Consider the role of cultural and social factors in the planning and delivery of public health services and interventions.
- Demonstrate critical evaluation of ethical values, theories, and principles that guide public health inquiry and decision-making.
- Analyze the public health information infrastructure used to collect, process, maintain, and disseminate data in order to allow for decisionmaking at an administrative level.
- Apply theory and strategy-based communication principles adapted to different contexts.
- Explain how biological, chemical, and physical agents affect human health.

Nutrition Learning Outcomes

- Applies foundational sciences to food and nutrition knowledge to meet the needs of individuals, groups, and organizations.
- Applies and integrates client/patient-centered principles and competent nutrition and dietetics practice to ensure positive outcomes.
- Applies food systems principles and management skills to ensure safe and efficient delivery of food and water.
- Demonstrates leadership, business and management principles to guide practice and achieve operational goals.
- Applies community and population nutrition health theories when providing support to community or population nutrition programs.
- Integrates evidence-informed practice, research principles and critical thinking into practice.
- Demonstrates professional behaviors and effective communication in all
 nutrition and dietetics interactions

Graduate Courses

MPH 6901 Public Health Concepts 3 s.h.

Organizational structure, history, law, ethics, essential services, global

problems, and future of public health.

Prereq.: Graduate standing, permission of course director required for non-MPH students.

MPH 6902 Social and Behavioral Sciences in Public Health 3 s.h.

Theories of health education and promotion; intervention (communication, collaboration, and strategies): sociocultural, diversity, and regional issues as pertains to public health.

Prereq.: Graduate standing, permission of course director required for non-MPH students.

MPH 6903 Epidemiology in Public Health 3 s.h.

Epidemiological methods, including study design, legal/ethical aspects, and Epi Info, applications of methods including screening, disease surveillance, outbreak investigation, and community needs assessment. Student presentations to focus on special topics such as infectious diseases, chronic conditions, etc.

Prereq.: Graduate standing, permission of course director required for non-MPH students.

MPH 6904 Biostatistics in Public Health 3 s.h.

Principles of biostatistics in the context of multiple public health applications, Epi Info, SAS, and JMP statistical packages to be used.

Prereq.: Graduate standing, permission of course director required for non-MPH students.

MPH 6905 Health Services Administration in Public Health 3 s.h.

Management principles, including personnel administration, budgeting, financing, and continuous quality improvement as pertains to public health. Planning and evaluation principles, grant writing, public health economics, public health policy, and data sources.

Prereq.: Graduate standing, permission of course director required for non-MPH students.

MPH 6905C CE Health Services Administration in Public Health 3 s.h.

Management principles, including personnel administration, budgeting, financing, and continuous quality improvement as pertains to public health. Planning and evaluation principles, grant writing, public health economics, public health policy, and data sources.

Prereq.: Graduate standing, permission of course director required for non-MPH students.

MPH 6906 Policy and Environmental Health Sciences in Public Health 3 s.h.

This course provides and overview of public health policy, policy development, and advocacy. Environmental health issues serve as an example of the intersection between policy and science. Environmental health topics include air/water quality, food hygiene, sanitation, municipal/infectious/hazardous waste, vector-borne disease, occupational health, legal/risk issues, One Health, and global issues.

Prereq.: Graduate standing, permission of course director required for non-MPH students.

MPH 6907 Grant Writing in Public Health Practice 3 s.h.

Methods and techniques for writing and managing grant proposals to support public health programs.

Prereq.: Permission of instructor required for non-MPH students.

MPH 6908 Public Health Practice and Issues 3 s.h.

In an organizational setting, the following topics will be explored: informatics and communication, diversity and cultural proficiency, ethics, and biology. These topics are emerging public health issues, which will be applied in a practice setting.

Prereq.: Graduate standing and MPH 6901.

MPH 6909 Public Health Research and Evaluation 3 s.h.

Students will critically review journal articles, create research questions, conduct comprehensive literature reviews, employ quantitative and qualitative research methods that fall within institutional review board parameters, develop and execute a data analysis plan. Culmination of coursework will be individual oral presentation and mock journal article.

Prereq.: Graduate standing; MPH 6903 and MPH 6904.

MPH 6994 Individual Investigation in Public Health 1-3 s.h.

Intensive research or readings on selected topic or problem to be selected in consultation with MPH graduate faculty. **Prereq.:** MPH 6901 and MPH 6904.

MPH 6995 Special Topics 1-5 s.h.

Specialized sections selected by faculty will focus on specific topics of current interest to public health practice. May be repeated with different topics up to 15 semester hours.

Prereq.: Graduate standing, permission of program director required for non-MPH students.

MPH 6996 MPH Practicum 3 s.h.

Student is teamed with a faculty advisor and community preceptor(s) to work on a meaningful public health issue. For students who desire additional field experience. students.

Prereq.: Graduate standing, permission of program director required for non-MPH.

MPH 6997 MPH Capstone Project 3-6 s.h.

A faculty advisor and community preceptor(s) are teamed with each student who will develop a paper (i.e., grant, study, proposal) on a meaningful public health issue learned from the core MPH courses.

Prereq.: Graduate standing; MPH 6901, MPH 6902, MPH 6903, MPH 6904, MPH 6905, and MPH 6906.

MPH 6997C MPH CE Capstone Project 3-6 s.h.

A faculty advisor and community preceptor(s) are teamed with each student who will develop a paper (i.e., grant, study, proposal) on a meaningful public health issue learned from the core MPH courses.

Prereq.: Graduate standing; MPH 6901, MPH 6902, MPH 6903, MPH 6904, MPH 6905, and MPH 6906.

MPH 6998 Capstone Project 1 3 s.h.

In-depth assessment of public health competencies and preparation for the culminating community experience in MPH Capstone II. **Prereq.:** graduate standing; MPH 6901, MPH 6902, MPH 6903, MPH 6904,

MPH 6905, and MPH 6906.

MPH 6999 Capstone Project 2 3 s.h.

A required culminating experience for MPH students to be taken after all core courses and MPH 6998 Capstone Project I are completed. In partnership with a community organization/agency.

Prereq.: graduate standing, MPH 6901, MPH 6902, MPH 6903, MPH 6904, MPH 6905, MPH 6906, and MPH 6998.

MPH 7008 Schools and Health 3 s.h.

Population focus survey of children's health issues and K-12 schools using CDC Coordinated School Program model as an organizing framework. Topics include school health policy, relationship of health and academic outcomes, and Youth Risk Behavioral Surveillance (YRBSS). Current research infused into the course.

Cross-Listed: NURS 7008.

Master of Respiratory Care

The Master of Respiratory Care program has been designed specifically for respiratory therapists who desire to enhance their career options in clinical and/or leadership roles within the respiratory care profession. The many resources available to respiratory care practitioners through key professional organizations are also integrated throughout the program. The core of the program builds on skills related to clinical research, leadership development, and technology applications related to educational and administrative settings. The student is encouraged to further develop their skill base in education, management, leadership and research. The Master of Respiratory Care program is a thirty semester hour program offered in a 100% asynchronous online format.

The Master of Respiratory Care (CoARC #520019) at Youngstown State University, Youngstown, Ohio is provisionally accredited by the Commission on Accreditation for Respiratory Care(CoARC), <u>www.coarc.com (http://</u> <u>www.coarc.com/)</u>

Current accreditation standing: CoARC granted Provisional accreditation for a maximum annual enrollment of up to 120 students.

Date of last campus visit: May 21, 2021

Date of next campus visit: To be determined

In addition to the minimum College of Graduate Studies admission requirements, applicants to the MRC program must hold a bachelor's degree from an accredited college or university and must meet the following requirements

- Regular admission requires a cumulative undergraduate grade-point average of at least 3.0 (on a 4.0 scale). Applicants with a cumulative undergraduate grade point average of 2.7 to 2.99 may be admitted provisionally. Applicants with a cumulative undergraduate grade point average of less than 2.7 will be required to submit an official report of the Graduate Record Examination (General Test) scores completed within the last five years for admission consideration.
- · Current state license as a respiratory care practitioner
- National Board for Respiratory Care(NBRC) professional RRT (advanced practitioner) credential
- Membership in the American Association for Respiratory Care (AARC) in order to access data/projects that will be needed in academic coursework
- Students not meeting regular admission requirements may be provisionally admitted. See the Graduate Catalog under Provisional Admission.

Graduate Faculty

Kelly Colwell, Ed.D., Associate Professor

Distance learning; improving patient and family health literacy through education for management of chronic asthma in children; improving access to healthcare in undeserved areas; improving student awareness of the need for cultural competency to better understand, educate, and treat patients in a multi-diverse patient population

Amanda Roby, M.H.H.S., Associate Professor

Salvatore Sanders, Ph.D., Professor

Technology applications for health care, education and management; student and faculty attributes related to learning; instructional design; distance learning

Bachelor of Science in Respiratory Care to Master of Respiratory Care - Advanced Placement Option

The advanced placement program allows prospective students of the Master of Respiratory Care an accelerated option after completing their undergraduate degree in respiratory therapy. Undergraduate students can apply for admission into the accelerated program after achieving junior status within the BSRC program with a GPA of 3.2 or higher. While in the accelerated BSRC program, students must maintain a minimum GPA of 3.0 to continue in the advanced placement option. Students can take up to 9 semester hours of graduate courses in fulfillment of both the requirements for the Bachelor of Science in Respiratory Care (BSRC) degree and the Master of Respiratory Care degree. Upon completion of the BSRC, students must apply and be accepted into the School of Graduate Studies and the Master of Respiratory Care program.

Admission Requirements

In addition to the minimum College of Graduate Studies admission requirements, applicants to the MRC program must hold a bachelor's degree from an accredited college or university and must meet the following requirements

• Regular admission requires a cumulative undergraduate grade-point average of at least 3.0 (on a 4.0 scale). Applicants with a cumulative undergraduate grade point average of 2.7 to 2.99 may be admitted provisionally. Applicants with a cumulative undergraduate grade point average of less than 2.7 will be required to submit an official report of the Graduate Record Examination (General Test) scores completed within the last five years for admission consideration.

- · Current state license as a respiratory care practitioner
- National Board for Respiratory Care(NBRC) professional RRT (advanced practitioner) credential
- Membership in the American Association for Respiratory Care(AARC)in order to access data/projects that will be needed in academic coursework
- Students not meeting regular admission requirements may be provisionally admitted. See the Graduate Catalog under Provisional Admission.

Degree requirements

The Master of Respiratory Care Program consists of nine (9) core courses and one directed elective. It is offered in a distance education format online. Students will be assigned an advisor that will offer guidance on choosing elective options and specific classes based on the student's educational endeavor, career interests and goals. Students must maintain a GPA of 3.0 or higher and complete 30 semester hours of study to complete the program.

COURSE	TITLE	S.H.	
RESC 5820	The Respiratory Care Profession	3	
RESC 6950	Respiratory Care Research	3	
RESC 6906	Respiratory Care Seminar	3	
RESC 6908	Leadership Development in Respiratory Care	3	
RESC 5860	Technology Applications for Health and Human Services	3	
RESC 6910	Competency Assessment in Respiratory Care	3	
HAHS 5875	Interprofessional Education for Health Professions	3	
RESC 6915	Education and Accreditation in Respiratory Care	3	
CRJS 6945	Research Methods in Health and Human Services	3	
Recommended Electives (3sh Required)			
RESC 5880	Advanced Management of the Ventilator Patient	3	
RESC 6922	Special Topics in Respiratory Care	3	
HHS 6962	Health Care Reform	3	
HHS 6958	Health Services Issues	3	
AHLT 5840	Comparative Health Systems	3	
AHLT 5807	Epidemiology	3	

- Upon completion of the program, graduates will demonstrate the ability to comprehend, prepare, apply, and evaluate evidence based research related to respiratory care.
- Upon completion of the program, graduates will demonstrate proficiency in the skills necessary to utilize current technologies such as, EMR/EHR computer and online charting and data collection systems/services and applications appropriate for respiratory management, respiratory education and research.
- Upon completion of the program, graduates will demonstrate leadership skills with applications within the healthcare delivery, education, management and research settings.
- Upon completion of the program, graduates will demonstrate the ability to comprehend, prepare, apply, and evaluate advanced clinical applications.
- Upon completion of the program graduates will be cognizant of cultural differences within diverse patient populations and have an awareness of how those differences may affect the delivery of healthcare and outcomes.

Graduate Courses

acceptance in MRC program.

RESC 5820 The Respiratory Care Profession 3 s.h.

Study of origins, current role, and future directions of respiratory care profession within the framework of the current health care environment. Examination of professional resources is also included. **Prereq.:** Active membership in American Association for Respiratory Care and

RESC 5860 Technology Applications for Health and Human Services 3 s.h.

Exploration of technology applications for education, presentations, communications and management in Health and Human Service disciplines. Creation of digital media such as audio and/or video files, spreadsheet macros, e-portfolios and Web-based applications of various technologies will be required. Application of technology to education, supervision or management will be evaluated through completion of a technology-enhanced project. **Prereq.:** Acceptance in MRC program.

Prereq. or Coreq.: Permission from program director if outside of the respiratory care program.

RESC 5880 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 the BSRC, BSRC degree advancement/completion program or Master of respiratory care program, junior standing, or permission of program director.

RESC 6906 Respiratory Care Seminar 3 s.h.

Development of a literature review on select current topics culminating in preparation of a scholarly paper consistent with Respiratory Care Journal Conference format and an accompanying PowerPoint presentation. **Prereq.:** Acceptance in MRC program.

RESC 6908 Leadership Development in Respiratory Care 3 s.h.

Using an evidenced-based perspective, the course will examine nature of leadership in health care organizations with an emphasis on selfunderstanding and learning to achieve both a theoretical and practical understanding of leadership. Health care managers need to be able to create, foster and manage organizations in which people thrive and perform at their best to achieve organizational excellence. **Prereg.:** Acceptance in MRC program.

RESC 6910 Competency Assessment in Respiratory Care 3 s.h.

Reviews how clinically-related competencies in respiratory care are measured including available tools. Evaluation of procedures performed by multiple health care practitioners including issues at state/national levels. Importance of assessing cultural competence also included.

Prereq.: Acceptance in MRC program.

$\label{eq:RESC6915} \begin{array}{cc} \mbox{Education and Accreditation in Respiratory Care} & \mbox{3 s.h.} \end{array}$

Comparison of institutional as well as programmatic accreditation requirements. Prepare students with up-to-date tools/approaches to address major educational accreditation concerns in hospital as well as in postsecondary settings. Students will also compare and contrast the role of accreditation in today's health care environment. **Prereq.:** Acceptance in MRC program.

RESC 6922 Special Topics in Respiratory Care 1-3 s.h.

Special topics for a focused study on problems, issues, or concerns that relate to respiratory care leadership.

Prereq.: Acceptance in MRC program.

RESC 6950 Respiratory Care Research 3 s.h.

Provides rationale behind evidence-based medicine and presents key elements of scientific research for one study, lab investigation or clinical trial. Course will culminate in creation of abstract to be submitted for publication in Respiratory Care journal.

Prereq.: Acceptance in MRC program.

Master of Science in Applied **Behavior Analysis**

Admission to the Master of Science in Applied Behavior Analysis has been suspended. Applications to the program are not being accepted at this time. Please the following link for other graduate programs: https:// catalog.ysu.edu/programs/ **Interim Program Director** Dr. Kristopher Brown, PsyD, BCBA-D,

COBA

330-941-3401

Debartolo Hall Room 337 kjbrown@ysu.edu **Program Description**

The Master of Science in Applied Behavior Analysis at Youngstown State University trains students in the theoretical and philosophical foundations of Applied Behavior Analysis (ABA); research on basic and applied problems; and applied techniques in such areas as the treatment of institutionalized populations, work with the developmentally disabled, organizational behavior management, as well as a wide range of other applications. ABA is a scientific approach to behavior, and as such, strives to establish evidence-based practices for treatment and education. This approach is consistent with a scientist-practitioner model of graduate training. The purpose of the program will be to train students in behavior analysis through a balanced combination of in-class coursework and practical experience in community settings. As a result of this training, students will be qualified, and strongly encouraged, to become certified as Board Certified Behavior Analysts by the Behavior Analysis Certification Board (www.bacb.com (http://www.bacb.com)).

The required coursework is intended to produce well-rounded professionals capable of becoming board certified and communicating with other professionals in the field, as well as those outside of the field (e.g. nurses, medical doctors, social workers, psychiatrists). Coursework in the program consists of 24 required semester hours in behavior analysis courses and one elective, as well as 12 credits of practical experience and (6) credits of thesis, for a total of 42 credits. As this is a cohort-based program (beginning each fall), no student not part of the cohort will be admitted to classes.

Admission Requirements

Students must have a bachelor's degree in psychology or a related field from an accredited college or university. Admission requires a cumulative grade point average of at least 3.0 (on a 4.0 scale) Applicants must also submit 1) curriculum vita/resume, 2) three letters of recommendation from individuals familiar with the applicant's academic and professional background, and 3) a letter of intent stating one's professional goals and how graduate education in behavior analysis will help fulfill said goals. An (optional) personal interview and/or additional information may be requested by the program's admission committee. Students with minor deficiencies may be accepted with provisional admission at the discretion of the program's admission committee. See the Graduate Catalog under Provisional Admission. All applicants must

have taken PSYC 2617 (Research Methods and Statistics I) and PSYC 2618 (Research Methods and Statistics II), or equivalent before beginning the program.

Kristopher Brown, PsyD, BCBA-D, COBA

Practice trends in applied behavior analysis; policy issues in applied behavior analysis, organizational behavior management; treatment of autism spectrum disorder (ASD) and other neurodevelopment delays.

Mary Brown, MS, BCBA, COBA

Joe Corpa, MS, BCBA, COBA

Rachael Dobson, MSEd, BCBA, COBA

Tricia Vallinger, M.S., BCBA, COBA

Degree Requirements

Students must complete a minimum of 42 semester hours: including eight content courses (24 s.h.), two years of practicum (12 s.h.), and six semester hours of thesis. The two years of practicum experience is critical for training qualified professionals who will succeed in the field and represent the program professionally. The first year will focus on functional analyses and behavioral assessments; the second year will require students to design and implement behavioral interventions. In addition to providing students with the supervised experience required for board certification, these experiences will allow students to put their classroom instruction into real-world practice. Practicum sites will be sufficiently varied to provide students with a significant breadth of experience. For example, if one year involves working with children, then the following year will find students working with senior citizens, or in a business setting, prison, or rehabilitation center. It is imperative that students gain experience with more than one client population during their practicum assignments. In this way, graduates will have a broad experience base, a deeper understanding of the underlying technology, as well as being more readily employable in a wide range of settings.

The master's thesis requires the students to complete a research project. This will involve surveying the relevant literature, designing a study, collecting data, writing up the results, and discussing the implications of your findings. Students will be strongly encouraged to present their findings at a research conference and develop a manuscript suitable for submission to the appropriate peer-reviewed scientific journal.

COURSE	TITLE	S.H.
PSYC 6960	Fundamentals of Applied Behavior Analysis	3
PSYC 6961	Foundations of Experimental Analysis of Behavior	3
PSYC 6962	Behavior Theory and Philosophy	3
PSYC 6963	Behavioral Interventions and Ethical Considerations	3
PSYC 6964	Observational Methods & Functional Assessment	3
PSYC 6965	Behavioral Systems Analysis	3
PSYC 6966	Research Methods in Applied Behavior Analysis	3
Elective		3
PSYC 6968	Practicum 1	6
PSYC 6969	Practicum 2	6
PSYC 7060	Thesis	6
Total Semester Hours		42

Total Semester Hours

Learning Outcomes

- 1. Demonstrate effective communication with professionals both in and outside of the field of Applied Behavior Analysis.
- 2. Master and apply behavioral techniques for assessment, functional analysis and behavior intervention.
- 3. Evaluate appropriate use of single-subject research designs.

4. Effectively conduct an original research project related to a specific behavior.

Master of Science in Biological Sciences

Program Director

Prof. Michael T. Butcher 4013 Ward Beecher Science Hall (330) 941-2195 mtbutcher@ysu.edu

Program Description

Biological Sciences offers a graduate program leading to the M.S. degree. This program provides both a strong foundation in fundamental principles and theories and an understanding of the advanced application of this information within the diverse disciplines of the life sciences. Students prepare, through coursework and faculty-guided original research, to pursue career paths in the professions, academia, research, business, and industry.

The Biological Sciences program includes faculty in:

- 1. molecular biology, microbiology, and genetics;
- 2. physiology and anatomy; and
- 3. environmental biology.

Students may pursue specific areas of specialization within and among these areas, including:

- · ecology,
- · microbiology,
- · molecular biology,
- genetics,
- immunology,
- entomology,
- vertebrate physiology,
- neuroendocrinology,
- neurobiology,
- · cell biology, or
- human anatomy.

The program is housed in Ward Beecher Hall. Specialized facilities include an analytical research laboratory housing modern analytical instruments, tissue culture laboratories, an animal facility, laboratories equipped for molecular and cellular research, and an extensive greenhouse facility. The department has exclusive use of two unique outdoor laboratories for field studies: the Youngstown State University Arboretum (a 115-acre reserve) and the Meander Reservoir (a 6,000-acre wildlife refuge and water impoundment), which collectively provide a valuable resource for environmental biology.

Advisement

Each student's course of study will be devised in consultation with the student's major advisor. The course of study will be based on the student's area of specialization, background, and career interests. Students must have their course schedules approved by their major advisor or the graduate director every semester.

Admission Requirements Application Deadline

Summer and Fall Start - Applications accepted through April 15th

Spring Start - Applications accepted through November 15th

requirements

In addition to the minimum College of Graduate Studies admission requirements applicants must have completed:

- 3.0 GPA
- Undergraduate degree in Biological Sciences or related field.
- Must meet English language proficiency standards.

Students with deficiencies in these areas should contact the Graduate Program Director in Biological Sciences prior to applying for admission.

Graduate Faculty

David K. Asch, Ph.D., Associate Professor Gene regulation in eukaryotic organisms; carbon catabolite repression in Neurospora crassa

Michael Butcher, Ph.D., Professor Comparative biomechanics: muscle structure and function with regard to locomotion and adaptive behaviors

Jonathan J. Caguiat, Ph.D., Professor Industrial microbiology and genetic and molecular biology techniques to characterize selenite and heavy metal resistant bacteria

Chester R. Cooper, Ph.D., Professor Molecular biology and microbiology; morphogenesis and virulence of pathogenic fungi; identification of anti-fungal targets

Thomas P. Diggins, Ph.D., Professor Field-based community and ecosystem ecology of streams and riparian zones

Carl G. Johnston, Ph.D., Professor

Microbiology; microbial and fungal ecology; interactions within microbial communities

Xiangjia Min, Ph.D., Professor

Bioinformatics; gene and genome annotation and evolutionary analysis; knowledge database development for secretomes and alternatively spliced genes

lan J. Renne, Ph.D., Professor

Plant community ecology; invasive species; community structure; allelopathic systems; avian ecology

Jill M. Tall, Ph.D., Associate Professor

Effects of environmental influences on acute inflammatory and chronic neuropathic pain

Robert E. Wardle, M.S., Associate Professor

Forensic science education; forensic chemistry; drug analysis; ethics in forensic science; investigation of the "CSI Effect"; fingerprint science

Degree Requirements

Students may pursue an M.S. degree in Biological Sciences in one of two options.

- The thesis option is a research-intensive program designed to provide students a strong foundation in fundamental biological principles and laboratory techniques through coursework and the completion of a faculty-supervised research project (Thesis).
- The non-thesis option allows students to gain an in-depth understanding of advanced principles in the Biological Sciences through coursework and the writing of a graduate review paper.

Thesis Option

Under this option, students work on a faculty-supervised, original research project and gain practical experience in research techniques and data collection and analysis. It is designed for students who wish to pursue careers in either academic or industrial laboratories, or those who plan to continue toward the terminal Ph.D. degree.

A minimum of 30 semester hours of credit is required for the M.S. degree with thesis option.

of the proposal,	TITLE submit an acceptable thesis proposal, pass an oral review submit an acceptable thesis reporting the results of rised research project, and pass an oral defense of the	S.H.
BIOL 6990	Master's Thesis Research (may repeat up to a maximum of six semester hours)	1-3
BIOL 6991	Research Methods for Thesis	3
BIOL 6988	Seminar in Biological Sciences (must take two semester hours)	2
One semester h	our of Topics (BIOL 6996-BIOL 7000)	1
	An additional 21 semester hours of course work with no more than eight semester hours at the 5000 level	
A minimum grad	de point average of 3.0 is required for graduation.	
Total Semester	Hours	30

Non-thesis Option

This option provides students with a strong understanding of biological theories and principles, but does not require an original research project and publication. It is designed for students whose future goal is a non-research oriented career, such as professional school or pharmaceutical sales.

A minimum of 30 semester hours of credit is required for the M.S. degree with a non-thesis option.

COURSE	TITLE	S.H.
BIOL 6994	Research Methods for Nonthesis	2
BIOL 6998	Topics in Physiology (Any Topics course may be used.)	1
Graduate level Bio	logy electives	24
BIOL 6988	Seminar in Biological Sciences (Course may be repeated)	3
Total Semester Hours		30

Total Semester Hours

Requires the submission of an acceptable graduate research paper and the oral review of this paper before their graduate committee.

Learning Outcomes

- 1. Students will be able to integrate and critique information in a specified sub-discipline of the Biological Sciences.
- 2. Students will be able to evaluate scientific literature in the Biological Sciences.
- 3. Thesis students will conduct independent research mainly in one of the numerous sub-disciplines of the Biological Sciences.
- Students will produce a Thesis or review paper that critiques current literature, evaluates scientific data, and presents novel data along with a conclusion.

Graduate Courses

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.

Coreq.: BIOL 5824L.

BIOL 5824L Behavioral Neuroscience Laboratory 0 s.h.

Behavioral Neuroscience Laboratory. **Prereq.:** BIOL 3730.

Coreq.: BIOL 5824.

BIOL 5827 Gene Manipulation 2 s.h.

Techniques of modern molecular biology including the use of restriction enzymes, plasmid and phage 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 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 5888 Environmental Biotechnology 3 s.h.

This course provides an overview of environmental biotechnology, engineering fundamentals, theory, and principles in application of biological treatment to solve environmental problems. Topics include relevant biological, chemical, and ecological processes, biological treatments of waste, land, and water. Environmental biotechnology is an essential tool to help humanity face enormous environmental health challenges, especially pollution, climate change, loss of habitat, and resulting threats to wildlife and human populations, their health outcomes and survival potential. This course is designed to summarize modern insights regarding evaluation and applications of environmental biotechnology.

Prereq.: CHEM 3719 or CEEN 3736.

BIOL 5888L Environmental Biotechnology Laboratory 0 s.h. Environmental Biotechnology Laboratory.

BIOL 6900 Advanced Bioinformatics 3 s.h.

An examination of how computer and informatics technology is applied to biological data analysis, particularly in the area of genomics data mining, and its use in genomics, molecular, and systems biology research. Three hours of lecture per week.

Prereq.: BIOL 4890 or permission of instructor.

BIOL 6902 Ecology of Lakes 3 s.h.

A study of the physical, chemical, biological, and ecological structure and function of lake ecosystems.

Prereq.: permission of instructor.

BIOL 6903 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.:** permission of instructor.

BIOL 6904 Introduction to Biomedical Research 2 s.h.

This course is designed for a student who is interested in learning about preclinical and clinical biomedical research investigations. Students will develop an understanding of hypothesis development, searching for and critically evaluating academic manuscripts/literature, experimental design and implementation, data evaluation and biostatistics, and modes of scientific communication.

Prereq.: Graduate standing or permission from the instructor. Cross-Listed: BIOL 4896.

BIOL 6906 Ecosystems Field Ecology 4 s.h.

Students will learn about destination ecosystems, including associated organisms, interactions, physical, chemical, climatic conditions, culture, and human impacts. Students must be in good health, hike, swim, and handle primitive conditions. Course may be taken more than once with different destination ecosystems. This course involves travel expenses in addition to lab fees.

Prereq.: permission of instructor.

BIOL 6909 The Human Microbiome 3 s.h.

This course 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.: One of the following courses: undergraduate microbiology, physiology, biochemistry, immunology, or molecular biology.

BIOL 6911 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 and two hours lab.

Prereq.: BIOL 2602 or BIOL 3705, and PHYS 1501 or PHYS 2610.

BIOL 6911L Comparative Biomechanics Lab 0 s.h.

Comparative Biomechanics Lab.

BIOL 6914 Hormones & Behavior 3 s.h.

A comparative study of the hormone-behavior interactions in animals. Topics include endocrine signaling, homeostasis and behavior, and neuroendocrine control of reproductive and social behavior. 3.0 s.h. **Prereq.:** BIOL 3711 or BIOL 3730, or permission of instructor.

Freieq.. BIOL 3711 OF BIOL 3730, OF PERMISSION OF INSTRUCT

BIOL 6919 Microbiome Gut Brain Axis 3 s.h.

This course covers the gut microbial communities and their interactions with the enteric and central nervous systems of humans and other animal hosts. Through its interactions with the nervous system, the gut microbiome influences the emotional and cognitive centers of the brain, whihc in turn may affect mental health, response to stress, and other nervous system disorders. This course explores these topics based on the scientific literature, discussions, and presentations.

Prereq.: BIOL 6909.

BIOL 6935 Advanced Physiology: Regulatory Mechanisms 3 s.h.

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 lecture. **Prereq.:** BIOL 3730 or equivalent.

BIOL 6935L Advanced Physiology: Regulatory Mechanisms Laboratory 1 s.h.

The 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.: BIOL 6935 or concurrent enrollment in BIOL 6935.

BIOL 6937 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. **Prereq.:** BIOL 3759 or BIOL 3750 or permission from instructor.

BIOL 6940 Microbial Physiology 4 s.h.

This course will present advanced topics in biomolecule synthesis, molecular biology, bacterial genetics, gene expression, energy production photosynthesis, bacteriophages, and microbial stress response. An integrative laboratory project emphasizing some of these topics will be included. Three hours lecture and three hours laboratory. **Prereq.:** Graduate standing.

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BIOL 6948 Biology of Fungi 4 s.h.

Examination of fungal and fungal-like organisms with emphasis placed upon their taxonomy, phylogenetic relationships, structure, function, physiology, genetics, and ecology. Their role in agriculture, medicine, and scientific research is explored as well. Three hours lecture and three hours laboratory. **Prereq.:** BIOL 3702 Microbiology and graduate standing.

BIOL 6949 Cellular and Molecular Mycology 3 s.h.

Specific cellular and molecular processes in fungal organisms will be examined in great detail. Topic areas include morphogenesis, dimorphism, signal transduction, gene expression and regulation, cellular differentiation, nutritional physiology, primary and secondary metabolism, and host/parasite interactions.

Prereq.: BIOL 3702 or equivalent, and graduate standing.

BIOL 6950 Comparative Animal Physiology 4 s.h.

The study of physiological mechanisms and adaptations of animals to environmental stresses of their habitats. Three hours lecture and three hours laboratory per week.

Prereq.: BIOL 3730 Human Physiology or equivalent.

BIOL 6950L Animal Physiology Lab 0 s.h. Animal Physiology Laboratory.

BIOL 6954 Advanced Ecology 3 s.h.

Interrelationships of species within the community and their influence upon the ecosystem.

Prereq.: Permission of instructor.

BIOL 6957 Advanced Immunology 3 s.h.

Fundamentals of immunological systems, including both humoral and cellular immunological responses. Immune response to infections, transplantation rejection, autoimmune diseases, allergy, and autoimmunity. Three hours of lecture a week.

Prereq.: BIOL 3702 Microbiology or equivalent.

BIOL 6957L Advanced Immunology Laboratory 2 s.h.

Immunologic laboratory techniques. Four hours of laboratory a week. Should be taken concurrently with BIOL 6957.

BIOL 6961 Forest Ecology 2 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. Two hours lecture.

Prereq.: 20 semester hours in BIOL or GES, or combination thereof, or permission of instructor.

Coreq.: BIOL 6961L.

Cross-Listed: BIOL 4866.

BIOL 6961L Forest Ecology Laboratory 2 s.h.

Laboratory and field experiences in Forest Ecology. Two hours lab, twice a week.

Coreq.: BIOL 6961.

BIOL 6963 Virology 3 s.h.

Viral structure, replication, infection, and pathogesis. The molecular biology of viruses and their interactions with host cells, and the use of viruses as tools for gene therapy and genetic engineering. Current research and viruses important in world health, such as HIV, will be emphasized. **Prereq.:** Graduate standing or permission of instructor.

BIOL 6963L Virology Lab 0 s.h.

Virology Laboratory.

BIOL 6964 Advanced Molecular Genetics 3 s.h.

An examination of the mechanisms of transcription, translation, DNA replication, and RNA processing and transposition in both prokaryotes and eukaryotes.

Prereq.: BIOL 4890 Molecular Genetics or permission of instructor.

BIOL 6967 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 and the relevance of stem cells to medicine and applied biology will be discussed. **Prereq.:** BIOL 5827 or equivalent.

BIOL 6968 Cell Culture Methods Laboratory 2 s.h.

This course provides instruction and training in standard animal cell culture techniques. Theory and practice using established cell lines. In addition, more advanced cell cultivation will be explored, bio-reactors and 3D bio-printing. **Prereq.:** permission of instructor.

BIOL 6974 Neuroendocrinology 3 s.h.

Current concepts of neuroendocrine processes will be discussed. **Prereq.:** BIOL 5833 or equivalent, or permission of instructor.

BIOL 6975 Neuropharmacology 3 s.h.

An examination of how drugs interact with the nervous system, including the locus of action for neuroactive substances and the mechanisms by which these substances cause change in physiology and behavior. **Prereq.:** Graduate standing or permission of instructor.

BIOL 6976 Cellular Neurophysiology 3 s.h.

Detailed study of ionic currents, regulation of neuronal firing patterns, synaptic transmission, and synaptic plasticity. **Prereq.:** BIOL 5832 or permission of instructor.

BIOL 6978 Teaching Practicum 1: Principles of Biology 1 s.h.

A course dealing with principles of pedagogy for both classroom and laboratory settings. This is a broad-based course, which will address basic principles and concepts of modern biology. Emphasis is on relationships between instruction and learning outcomes. Required of all graduate teaching assistants in the Biological Sciences. Students will be assigned a grade of S/ U. May be repeated.

BIOL 6979 Teaching Practicum: 1545 Anatomy and Physiology 1 s.h. A course dealing with the principles of pedagogy for BIOL 1545 Allied Health Anatomy and Physiology. This course addresses classroom and laboratory topics in human anatomy and physiology, with an emphasis on the relationships between instruction and learning outcomes. Required of graduate teaching assistants providing instructional support for BIOL 1545. Students will be assigned a grade of S/U. May be repeated.

BIOL 6981 Teaching Practicum: 1551 Anatomy and Physiology 1 s.h.

A course dealing with the principles of pedagogy for BIOL 1551 Anatomy and Physiology I. This course addresses classroom and laboratory topics in human anatomy and physiology with an emphasis on the relationships between instruction and learning outcomes. Required of graduate teaching assistants providing instructional support for BIOL 1551. Students will be assigned a grade of S/U. May be repeated.

BIOL 6982 Teaching Practicum: 1552 Anatomy and Physiology 2 1 s.h. A course dealing with the principles of pedagogy for BIOL 1552 Anatomy and Physiology II. This course addresses classroom and laboratory topics in human anatomy and physiology with an emphasis on the relationships between instruction and learning outcomes. Required of graduate teaching assistants providing instructional support for BIOL 1552. Students will be assigned a grade of S/U. May be repeated.

BIOL 6988 Seminar in Biological Sciences 1 s.h. May be repeated up to two semester hours.

BIOL 6989 Graduate Research Experience 1-3 s.h.

Independent study for graduate students wishing to learn specific biological research techniques. Applicable only to biology graduate students following the nonthesis or biology education options. May be repeated for up to a total of three semester hours.

Prereq.: Permission of instructor or department chair.

BIOL 6990 Master's Thesis Research 1-6 s.h.

Research selected and supervised by departmental advisor and approved by graduate faculty of Biology Department and graduate dean. May be repeated for a maximum of six semester hours.

Prereq.: Acceptance by departmental committee.

BIOL 6991 Research Methods for Thesis 3 s.h.

Discussion and demonstration of current methods and concepts related to research in biological sciences and writing of a graduate thesis proposal. Not applicable for students enrolled in the nonthesis or biology education options. May be repeated once.

Prereq.: Permission of instructor.

BIOL 6994 Research Methods for Nonthesis 2 s.h.

A course focused on reviewing current biological concepts as reported in the scientific literature. Not applicable for students enrolled in the thesis or biology education options.

Prereq.: Permission of instructor.

BIOL 6996 Topics in Ecology 1 s.h.

An arranged course in terrestrial and aquatic ecology. May be repeated with a different subject up to 2 s.h.

Prereq.: Permission of instructor.

BIOL 6997 Topics in Molecular and Cellular Biology 1 s.h.

An arranged course in subjects at the molecular level of life. May be repeated with different subject up to 2 s.h. **Prereq.:** Permission of instructor.

BIOL 6998 Topics in Physiology 1 s.h.

An arranged course for advanced subjects in vertebrate physiology. May be repeated with a different subject up to 2 s.h. **Prereq.:** Permission of instructor.

BIOL 7000 Topics in Microbiology 1 s.h.

An arranged course on subjects of microbiology. May be repeated with a different subject up to 2 s.h. **Prereq.:** Permission of instructor.

Master of Science in Chemistry

Program Director

Dr. Doug Genna 5009 Ward Beecher Science Hall (330) 941-2261 dtgenna@ysu.edu (srlovelacecameron@ysu.edu)

Program Description

The Department of Chemistry offers a program of study leading to the M.S. degree with concentrations available in:

- analytical,
- biochemistry,
- · inorganic,
- materials,
- organic, and
- · physical chemistry.

The program prepares the student for practice as a professional chemist by teaching academic fundamentals, creative and independent thinking through independent study and research, and leadership skills through interaction with undergraduate students as graduate teaching assistants. The program is also excellent preparation for further advanced study at other institutions, leading to the Ph.D. degree in chemistry or professional degrees in chemistry-related fields. The department has state-of-the-art instrumentation facilities and a wide assortment of instruments readily available for student and faculty research including: two powder- and three single-crystal X-ray diffractometers, a transmission electron microscope, a Focused Ion Beam/Scanning Electron Microscopy system, two 400 MHz NMRs, FTIR, ICP-AES, AA, GC-MS, LC-MS, high resolution MS, several HPLCs, X-ray fluorescence, thermogravimetric analyzers, differential scanning calorimeter, gel permeation chromatograph, diode array spectrophotometers, and electrochemical systems.

Advisement

Entering students are advised by the program director. Within the first semester of full-time graduate studies, the student should select a thesis advisor, who will assist the student in planning the remainder of the program. Within the first year of full-time graduate studies, the student should select a thesis advisory committee in consultation with the thesis advisor. The committee, including the advisor, will meet periodically with the student to evaluate the progress of the research and to provide guidance.

Combined Bachelors/Masters Program

Highly qualified undergraduate students completing degrees in chemistry, biochemistry, or forensic science can apply for admission into the combined "4+1" Bachelors/Masters program for the MS in Chemistry. See the descriptions in the undergraduate catalog.

Admission Requirements

In addition to the minimum admission requirements of the College of Graduate Studies, an applicant for admission to the M.S. degree program in the Department of Chemistry must present an undergraduate major that includes a minimum of 20 semester hour equivalents of undergraduate chemistry course work.

In those cases where the undergraduate preparation is slightly deficient, the applicant may be admitted with provisional status with the approval of the chair of the Chemistry Department and the Graduate Dean.

Applicants need to provide the names and contact information of three references and responses, of less than one page, to the following four statements;

- Describe your academic background. Indicate major and minor(s) in college study, any honors attained or special activities engaged in, and degrees, titles or certificates earned.
- Describe your employment experience in chronological order, including name and location of employer, kinds of positions held, and responsibilities involved.
- 3. Describe any research experience or if you have an interest in a specialized field within chemistry.
- Describe your purpose in working for a master's degree, including your occupational plans and goals.

Graduate Faculty

Ganesaratnam K. Balendiran, Ph.D., Professor

Biomolecular structural biochemistry; structure and function of biological molecules and manipulation of their physiological properties with novel chemicals for health benefits

Susan Citrak, Ph.D., Assistant Professor

Douglas T. Genna, Ph.D., Professor

Metal-organic frameworks;Synthesis of new materials; Mechanistic investigations of self-assembly; targeted materials for water and blood detoxification

Allen D. Hunter, Ph.D., Professor

Materials chemistry; crystallography; instrumental Methods; chemistry education

John A. Jackson, Ph.D., Professor

Synthetic organic chemistry; organophosphorus chemistry; synthetic methodology; biologically active compounds; asymmetric synthesis

Brian D. Leskiw, Ph.D., Professor

Mass spectrometric investigation of various compounds, including chemical vapor deposition precursors, substituted phenols, and trace analysis of pyrazines/haloanisoles

Clovis Linkous, Ph.D., Professor

Ceramic electrolytes, polymer membrane electrolytes, solid state hydrogen storage, photovoltaic materials, photocatalysis; flexible and optically transparent conductors

Peter Norris, Ph.D., Professor

Synthesis of novel monomers, oligomers, and polymers derived from carbohydrates; environmentally friendly methods to organic synthesis; catalytic decomposition of natural azide nad diazo

Michael A. Serra, Ph.D., Associate Professor Effects of free radicals on proteins

Josef B. Simeonsson, Ph.D., Professor

Analytical atomic and molecular spectroscopy; trace and ultratrace analysis; laser induced fluorescence spectroscopy; laser ionization spectroscopy; Raman spectroscopy; environmental analysis

Nina V. Stourman, Ph.D., Professor

Studies of bacterial functional genomics during response to stress; bacterial glutahione metabolism and the mechanism and biological role of bifunctional

enzyme glutahionyl spermidine synthetase/amidase (GSS) and its products in E. coli

Timothy R. Wagner, Ph.D., Professor, Chair

Synthesis of inorganic oxide and mixed-anion materials; structure characterizations using single crystal and powder X-ray diffraction; electron microscopy techniques

Robert E. Wardle, M.S., Associate Professor

Forensic science education; forensic chemistry; drug analysis; ethics in forensic science; investigation of the "CSI Effect"; fingerprint science

A minimum of 30 semester hours of credit is required for the M.S. degree.

COURSE	TITLE	S.H.
Required Courses		
CHEM 6980	Introduction to Chemical Research (taken the first year)	3
CHEM 6981	Seminar 1	1
CHEM 6982	Seminar 2	1
Content Chemistry	Courses	
CHEM 6921	Advanced Biochemistry 1	3
CHEM 6941	Advanced Organic Chemistry 1	3
CHEM 6911	Advanced Analytical Chemistry 1	3
or CHEM 6912	Advanced Analytical Chemistry 2	
Two courses in CH	EM 5800 or 6900	6
•	Assistantship program requires 9 hours, non- ram requires 10 hours)	
CHEM 6990	Thesis	9-10
CHEM 6975	An Introduction to Teaching Chemistry (Required only for Graduate Assistantship students)	1
Total Semester Ho	urs	80-31

For graduation, the student must achieve a grade point average of 3.0 or higher in chemistry and must complete an acceptable research proposal, written thesis, and oral defense of the thesis.

Teaching Assistants

COURSE	TITLE	S.H.
Required Courses		
CHEM 6980	Introduction to Chemical Research (taken the first year)	3
CHEM 6981	Seminar 1	1
CHEM 6982	Seminar 2	1
CHEM 6975	An Introduction to Teaching Chemistry (taken the first year)	1
Register for one of the degree):	the following each semester (does not count towards	
CHEM 6976	Teaching Practicum in General Chemistry	
CHEM 6977	Teaching Practicum in Chemistry for Allied Health Sciences Lab	
CHEM 6978	Teaching Practicum in Organic Chemistry	
CHEM 6979	Teaching Practicum for Chemistry in Modern Living Lab	
Content Chemistry Courses		
Must include 6921	, 6941, and either 6911 or 6912	15
Electives		
CHEM 6990	Thesis	9
Total Semester Ho	urs	30

For graduation, the student must achieve a grade point average of 3.0 or higher in chemistry and must complete an acceptable research proposal, written thesis, and oral defense of the thesis.

Non-thesis Option

COURSE	TITLE	S.H.
Required Courses		
CHEM 6980	Introduction to Chemical Research	3
CHEM 6911	Advanced Analytical Chemistry 1	3
CHEM 6912	Advanced Analytical Chemistry 2	3
CHEM 6921	Advanced Biochemistry 1	3
CHEM 6931	Advanced Inorganic Chemistry 1	3
CHEM 6941	Advanced Organic Chemistry 1	3
CHEM 6991Q	Special Topics Quantum Chemistry	3
Electives (up to 6 l be used for 6991T Inter	nours can be used for 6991T Internship) ^{up to 6 hours can} nship	6
Non-thesis Resear	ch	3
Total Semester Hours		30

Learning Outcomes

- 1. Graduate students will demonstrate a thorough understanding of the chemical principles related to their chosen area of Chemistry or Biochemistry.
- 2. Graduate students will demonstrate the ability to search and critically assess the scientific literature.
- 3. Graduate students will demonstrate a thorough understanding of the applications and basic principles of the chemical instrumentation, techniques, and/or software that is commonly used in their sub-discipline.
- 4. Graduate students will effectively communicate their research ideas and findings both orally and in writing.

Graduate Courses

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 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 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 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.

CHEM 6911 Advanced Analytical Chemistry 1 3 s.h.

Theory and applications of spectroscopy and theory of chemical separation methods.

Prereq.: CHEM 3739 Physical Chemistry I.

CHEM 6912 Advanced Analytical Chemistry 2 3 s.h.

Applications of chemical separation methods and theory and applications of electrochemistry and electrochemical techniques. **Prereq.:** CHEM 3739 Physical Chemistry.

CHEM 6921 Advanced Biochemistry 1 3 s.h.

Protein structure and intermediary metabolism. **Prereq.:** CHEM 3720, or concurrently with CHEM 3737 or CHEM 3739.

CHEM 6922 Advanced Biochemistry 2 3 s.h.

A study of metabolic pathways and other biochemical systems at the molecular level.

Prereq.: CHEM 6921.

CHEM 6931 Advanced Inorganic Chemistry 1 3 s.h.

Current theories and types of bonding. Modern structural principles with applications in main-group molecular compounds, coordination compounds, and inorganic solids.

Prereq.: CHEM 3729 Inorganic Chemistry.

CHEM 6932 Advanced Inorganic Chemistry 2 3 s.h.

Transtition metal organometallic chemistry emphasizing molecular structure, bonding methods, characterization, and functional group reactivity. The properties, chemical reactivity, and trends of the elements. **Prereq.:** CHEM 5830, CHEM 6931, or permission of instructor.

CHEM 6941 Advanced Organic Chemistry 1 3 s.h.

Principles of chemical bonding and structure in organic molecules, physical organic chemistry, structure of reactive intermediates, stereochemistry, and detailed descriptions of reaction mechanisms.

CHEM 6942 Advanced Organic Chemistry 2 3 s.h.

Detailed study of functional group transformations in organic synthesis as applied to the preparation of complex molecules. Carbon-carbon bond forming reactions, organometallic reagants in organic synthesis, oxidation-reduction chemistry, and multi-step synthesis. **Prerea.:** CHEM 6941.

CHEM 6951 Advanced Physical Chemistry 1 3 s.h.

Principles of quantum chemistry and spectroscopy with applications.

CHEM 6952 Advanced Physical Chemistry 2 3 s.h. Molecular basis of thermodynamics and kinetics.

CHEM 6975 An Introduction to Teaching Chemistry 1 s.h.

A course to prepare graduate students to serve as teaching assistants in both chemistry laboratories and recitations. Topics include laboratory safety (governmental regulations, ACS guidelines, hazardous materials, waste disposal) and practical matters of teaching (active learning, leading discussions, grading, cheating, etc.). Required of all graduate students serving as first-year teaching assistants.

CHEM 6976 Teaching Practicum in General Chemistry 2 s.h.

Teaching strategies in the General Chemistry laboratory. Students will meet with General Chemistry course instructors and must demonstrate proficiency in the material to be presented in CHEM 1515 General Chemistry 1 and CHEM 1516 General Chemistry 2 laboratories. Grading for CHEM 6976 is S/U. May be repeated for a total of six semester hours for CHEM 6976, CHEM 6977, CHEM 6978, and CHEM 6979.

Prereq. or Coreq.: CHEM 6975.

CHEM 6977 Teaching Practicum in Chemistry for Allied Health Sciences Lab 2 s.h.

Teaching strategies in CHEM 1510. Students will meet with the course instructor and must demonstrate proficiency in the material to be presented in CHEM 1510. Grading for CHEM 6977 is S/U. May be repeated for a total of six semester hours for CHEM 6977. **Prereq.:** or concurrent: CHEM 6975.

CHEM 6978 Teaching Practicum in Organic Chemistry 2 s.h.

Teaching strategies in the organic chemistry laboratory. Students will meet with organic chemistry course instructors and must demonstrate proficiency in the material to be presented in CHEM 3719 Organic Chemistry 1 and CHEM 3720 Organic Chemistry 2 laboratories. Grading for CHEM 6978 is S/U. May be repeated for a total of six semester hours for CHEM 6976, CHEM 6977, CHEM 6978, and CHEM 6979.

Prereq. or Coreq.: CHEM 6975.

CHEM 6979 Teaching Practicum for Chemistry in Modern Living Lab 1 s.h.

Teaching strategies in the Chemistry in Modern Living Laboratory. Students will meet with course coordinator and must demonstrate proficiency in the material to be presented in CHEM 1500L. Grading for CHEM 6979 is S/U. May be repeated for a total of six semester hours for CHEM 6979. **Prereq. or Coreq.:** CHEM 6975.

CHEM 6980 Introduction to Chemical Research 3 s.h.

Principles of chemical research planning, design, execution, and reporting. Includes research proposals, record keeping, written reports, oral presentations, the reviewing process, and professional standards. The application of the principles of chemical research to the student's M.S. research project. Required of all first-year students in the M.S. program in chemistry.

CHEM 6981 Seminar 1 1 s.h.

Preparation of a formal written research proposal and oral presentation of the proposal. Under the guidance of a research supervisor, the student will investigate the background literature and rationale for a project. Required of all first-year students in the M.S. program in chemistry. Hours arranged. **Prereq.:** CHEM 6980 and permission of the Chemistry chair.

CHEM 6982 Seminar 2 1 s.h.

Oral presentation and defense of thesis. Hours arranged. **Prereq.:** CHEM 6981 and permission of the thesis advisor, or concurrently with six semester hours of CHEM 6990.

CHEM 6983 Non-thesis Research 3 s.h.

Preparation of a written and oral report on a relevant chemical topic. The written and oral report will be evaluated by a three-membered committee chosen by the student and instructor. This course is mandatory for all non-thesis Chemistry Masters students and should be taken in their final semester.

CHEM 6990 Thesis 1-9 s.h.

Hours arranged. May be repeated.

CHEM 6991 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.

Master of Science in Criminal Justice Program Director

Dr. Christopher M. Bellas 1420 Cushwa Hall (330) 941-2167

cmbellas@ysu.edu

Program Description

The Master of Science in criminal justice at YSU provides professional education for criminal justice students. Criminal Justice faculty members are currently involved in research in police management theory, applied police management, correctional organization and treatment, crime statistics, and criminological theory. Students are encouraged to participate in this ongoing research.

Students considering a career in the field of criminal justice should be aware that many employers and agencies may require applicants to meet certain preemployment qualifications. These may include, but are not limited to,

- · lack of a criminal record,
- · satisfactory background checks,
- · physical standards and conditions, and
- emotional stability.

Combined Bachelor's/Master's Program

The 4 plus 1 accelerated program in Criminal Justice allows admitted Criminal Justice students to complete both their Bachelor's and Master's Degree in a total of five years instead of six. Students can take a maximum of nine graduate credit hours and apply them to both degrees, once admitted into the program. The goal of the program is to allow students to enter the competitive job market sooner rather than completing two separate programs.

Admission Requirements

While an undergraduate degree in this discipline is not required for admission, a substantial background in the social sciences is preferred. Students lacking such preparation will, at the discretion of the department, be required to make up deficiencies. Each student must have completed:

- the equivalent of CRJS 1500 Introduction to Criminal Justice,
- · a course in criminology and/or crime and delinquency,
- · an introductory course in statistics, and
- a research methodology course.

Students admitted with deficiencies in any of these requirements must remove them by completion of the second semester of graduate coursework.

Regular Admission

To obtain regular admission, students must have a cumulative grade point average in undergraduate work of 3.0 or higher (on a 4.0 scale) or a satisfactory standardized test score (30th percentile or higher on the GRE overall, or MAT group overall score) and undergraduate GPA of 2.7 or higher. If students meet these criteria but have undergraduate coursework deficiencies, they may be granted provisional admission.

Provisional Admission

A student with a cumulative GPA in undergraduate work below a 3.0 must have either of the following two criteria in order to obtain provisional admission:

1. a satisfactory standardized test score (30th percentile or higher on the MAT, GRE, or GMAT)

2. an undergraduate GPA of 3.0 or higher (on a 4.0 scale) in the last 30-40 hours of coursework.

Upon admission to the criminal justice graduate program and selection of emphasis area, each student is guided by a committee of three faculty members. The student selects a graduate advisor in the area of concentration from the Criminal Justice faculty. This advisor serves as the chair of the student's graduate committee. The student and advisor select the other two members of the committee, both of whom must be members of the graduate faculty and one of whom may come from a program other than Criminal Justice. This committee will assist the student as appropriate with the planning of the program, preparation and oral defense of the thesis, or the graduate paper and its defense in the case of the nonthesis option.

Academy Training and Life Experience

Opportunities are available through the Department of Criminal Justice and Consumer Sciences for students who do not have life experience or police academy training.

Combined Bachelor's/Master's Program

Admission to take part in the 4 plus 1 program includes: 78 hours completed as an undergraduate student majoring with a BSAS in Criminal Justice; an undergraduate GPA of 3.0; and admission into the YSU College of Graduate Studies. Students must complete an "intent to enroll in the accelerated program" by their junior year, so that they can begin taking courses that would apply to the graduate program. Students who have taken "swing courses" cannot retroactively apply them to the accelerated program.

Graduate Faculty

Christopher M. Bellas, Ph.D., Professor Capital punishment; court process; law; jury decision-making; criminology victimization.

John M. Hazy, Ph.D., Professor, Chair Community/behavioral health (drugs and crime); methodology and assessment; life course and cultural issues; teaching effectiveness

Monica Merrill, Ph.D., Associate Professor Criminology; victimization; inequalities

Richard Lee Rogers, Ph.D., Associate Professor Social problems and criminology; organizational and economic sociology; statistics and research methods; social history; Anglo-American religious movements; ecological analysis

Patricia Bergum Wagner, J.D., Associate Professor Substantive criminal law; court structure; appellate practice

The graduate program in criminal justice adheres to the position that the administration of criminal justice is a continuous, integrated process from prevention of crime through completion of all legal intervention. The program is designed to provide society with individuals who have both a substantial awareness of the overall system and the essential competencies required to perform professional roles within it. To achieve this objective, the program broadens the student's knowledge of the total criminal justice process and provides professional education so that its graduates may assume positions of leadership within the criminal justice system. The program also prepares students for doctoral studies in criminal justice or criminology.

Students seeking the M.S. degree in criminal justice may elect either a thesis or non-thesis option. The Criminal Justice program will accept courses from other departments offering 5000- or 6000-level courses. Students should see the graduate coordinator when selecting these courses.

COUR	SE	TITLE	S.H.
Core Courses (12-15 hours)			
CB	IS 6975	Applied Police Correction Management	

	CRJS 6910	Law and Criminal Justice
	or CRJS 699	0Criminal Justice Public Policy Seminar
	CRJS 6920	Criminal Justice Studies, Practices, and Theories
	or CRJS 691	5 Advanced Criminology
	CRJS 6942	Research and Statistics in Health and Human Services *CRJS 6942 or both CRJS 6940 and 6945
	or CRJS 694	0Statistical Techniques in Health and Human Services
	and CRJS 6945	
~	ve duete Demen/Du	aniant (2 hours) or Theorie (6 hours)

Graduate Faper/Froject (2 nours) of mesis (0 nours)		
	CRJS 6998	Graduate Capstone Project
	CRJS 6999	Research and Thesis
	Electives (21-12 h	ours)

Thesis Option

A minimum of 30 semester hours is required in this option, of which up to six hours may be thesis. No more than nine semester hours may be below the 6900 level.

Non-Thesis Option

A minimum of 35 semester hours is required of which no more than 12 semester hours may be below the 6900 level. The non-thesis option will require a major graduate research paper or graduate project worth two credits and an oral exam (defense) upon its completion.

Combined Bachelor's/Master's Program

Nine hours from a special menu of courses can be applied to the graduate program from a student's undergraduate program. Of these 9 hours, 2 courses (6 hours) must be core courses. The special menu includes the selection of one CRJS swing (5800-level) course or CRJS 6925 and 2 out of these 9 6900-level courses (CRJS 6910, CRJS 6915, CRJS 6920, CRJS 6942, CRJS 6940, CRJS 6945, CRJS 6950, CRJS 6975, and CRJS 6990). After completing the required 120-124 hours of the undergraduate program, 4+1 students then choose a completion path involving either a thesis or a graduate project in the same manner as a non-accelerated student except the 4+1 students get to carry over 9 of the their graduate hours earned in their 4th year.

For the thesis path, students need 21 more hours given they are starting with 9 hours and therefore should take the following courses:

1-6 hours of CRJS 6999 Thesis

3 hours of law/policy core CRJS 6910 or CRJS 6990

3 hours of theory/core CRJS 6915 or CRJS 6920

3-6 hours of methods/core CRJS 6942 or both CRJS 6940 and CRJS 6945

3 hours of management/core CRJS 6975 or CRJS 6950

0-8 hours of electives.

Students can use only 9 hours of 5800 level courses for those who choose the thesis option.

For the non-thesis option (i.e. the Graduate Project path), students need 26 hours to accompany the 9 hours of carry over from the 4th year in the form of these guidelines:

2 hours of CRJS 6998 Graduate Project

3 hours of law/policy core CRJS 6910 or CRJS 6990

3 hours of theory/core CRJS 6915 or CRJS 6920

3-6 hours of methods/core CRJS 6942 or both CRJS 6940 and CRJS 6945

3 hours of management/core CRJS 6975* or CRJS 6950 and

9-12 hours of electives.

Students can use only 12 hours of 5800 level courses if they choose the non-thesis (Graduate Project) option.

Learning Outcomes

SLO1: Students will demonstrate knowledge on how to evaluate programs, policies, theories, and research related to the Criminal Justice system.

SLO2: Students will demonstrate knowledge on how to use key Criminal Justice concepts to administrate programs and lead others.

SLO3: Students will demonstrate knowledge on how to perform their own research related to the Criminal Justice system.

Graduate Courses

CRJS 5802 Corrections Law and Liability 3 s.h.

Analysis and examination of legal mandates and restrictions affecting the field of corrections. History of the development of offender rights, current issues surrounding offender rights, and future concerns in this area. Jail and prison standards, accreditation standards, case law, and liability concerns. **Prereq.:** CRJS 3719 or graduate student standing.

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 consist with present work or long-term career plans.

Prereq.: CRJS 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 2601 or graduate student standing.

CRJS 5872 Drugs and Crime 3 s.h.

This course will cover the drug-crime connection. In doing so, a wide variety of topics will be highlighted from a history of criminal justice policies on various drugs to ways to prevent and treat substance abuse. The three learning objectives (LO) that will be pursued in this course are: 1) explain the context of the criminal justice approaches to specific types of drugs; 2) apply criminal justice (CJ) theories on drug use and abuse; and 3) analyze and assess drug-control policies and criminal justice intervention/management strategies. These three course objectives relate to the overall CJ degree learning outcomes in fostering critical thinking relative to CJ policies, literature review development, and the inter-relationships within the CJ system.

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.: Graduate student standing or CRJS 2602 and CRJS 2603.

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 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 6950X Special Topics: Sex Crimes 3 s.h.

It will cover different types of sex crimes including but not limited to prostitution, pornography (adult and child), human trafficking, sexual assault, and rape. Legislation, offender typologies, and treatments will also be covered. **Prereq.:** Junior standing or permission of the Chair.

CRJS 6955 Independent Study 3 s.h.

Study under the personal supervision of a faculty member with the approval of the graduate coordinator. 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 coordinator.

CRJS 6960 Program Planning and Evaluation 3 s.h.

A systematic review and evaluation of human services programs with special attention to 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 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 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. **Prereq.:** Approval by graduate director; Permit required.

CRJS 6995C CE 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 Capstone Project 2 s.h.

Under the direction of a graduate committee, led by the committee advisor, this course will provide the student with the structure and support to develop a scholarly project or paper related to the field of Criminal Justice. The course will allow students to search, review, critique, and appraise current research and evidence in the field of Criminal Justice and to develop a project or paper making a significant contribution to the discipline. Permission of the Graduate Coordinator.

Prereq.: Permission of the Graduate Coordinator.

CRJS 6999 Research and Thesis 1-6 s.h.

A research project under the supervision of a full-time faculty member of the department in CRJS with graduate faculty status. Permission of the Graduate Coordinator. May be repeated for a maximum of 6 semester hours.

Master of Science in Environmental Science

Program Director

Dr. Felicia Armstrong Moser Hall 2080 330-941-1385 fparmstrong@ysu.edu

Program Description

The Environmental Science program offers a multidisciplinary, interdepartmental graduate program leading to a Master of Science degree. The program office is housed in Ward Beecher Hall and is administered by the Department of Physics, Astronomy, Geology and Environmental Sciences. This program is intended for individuals who have undergraduate degrees in Environmental Science, other natural or social sciences, engineering, or health professions. It is designed to meet the needs of students and working professionals preparing for supervisory roles in environmental science (research and management), with emphasis on a risk-based approach to the solving of environmental problems. The curriculum requires students to broaden their knowledge with core courses in Environmental Science, and related disciplines to deepen their expertise with elective courses, and to demonstrate their abilities to prepare a scholarly thesis or participation in an internship. This degree will benefit students who are planning careers with regulatory agencies, regulatory compliance and management, research facilities, and consulting firms providing state-of-the-art assessment, management, and remediation.

Admission Requirements

A cumulative undergraduate minimum grade point average of 2.7 (on a 4.0 scale) is required for admission.

GRE not required

Bachelor's degree in Environmental Science or related field

Graduate Faculty

Felicia P. Armstrong, Ph.D., Professor Environmental chemistry of soils; water quality; ecotoxicology; soil remediation

Thomas Jordan

Environmental geophysics; archaeo-geophysics; hydro-geophysics; exploration; geophysics and hydrogeology

Colleen McLean, Ph.D., Associate Professor Aqueous and environmental geochemistry; paleolimnology; biogeochemistry

lan J. Renne, Ph.D., Professor

Plant community ecology; invasive species; community structure; allelopathic systems; avian ecology

Bradley A. Shellito, Ph.D., Professor

Applications of geospatial technology (Geographic Information Science, remote sensing, global positioning systems, and 3D Modeling)

Josef B. Simeonsson, Ph.D., Professor

Analytical atomic and molecular spectroscopy; trace and ultratrace analysis; laser induced fluorescence spectroscopy; laser ionization spectroscopy; Raman spectroscopy; environmental analysis

Degree Requirements

Environmental Science program provides coursework designed to provide breadth in environmental science and understanding of environmental issues and regulations. Each student admitted to the program will meet with the program director to choose initial coursework and to meet graduate faculty. Each thesis-track student is required to assemble a thesis committee with the recommendation of his or her thesis advisor upon admission.

All students in the Environmental Science graduate program must have their course schedules approved by the program director every semester. A proposed course of study must be approved by the the program director (and thesis committee for students in the thesis track). The course of study will be based on the student's area of specialization, background, and career interests.

The thesis committee will consist of three to five faculty members in appropriate fields of expertise and one non-faculty professional. The nonfaculty member must qualify for appointment as an adjunct graduate faculty member at YSU. Research proposals and proposed course of study must be completed and approved by the thesis committee by the end of the second semester of full-time graduate study.

The thesis shall advance knowledge in environmental science and be applicable to the solving of environmental problems. The thesis requirement includes a formal document and a draft article in journal format suitable for journal submission. A draft of the thesis must be reviewed by the thesis advisor then submitted to the thesis committee two weeks before the thesis defense. The thesis defense will comprise an oral presentation before the thesis committee for final thesis approval.

COURSE	TITLE	S.H.
Required Courses		
ENST 5810	Environmental Safety	3
ENST 5860	Environmental Regulations	3
ENST 6900	Advanced Environmental Studies	3
BIOL 5853	Biometry	3
GEOG 6901	Introduction to Geographic Information Science	3
ENST 5830	Toxicology and Risk Assessment	3
OR		
ENST 6931	Ecological Risk Assessment	
Required Course To	otal	18
ELECTIVES		
Non-thesis student	s select 9sh from the following:	
Thesis students se	lect 6sh from the following:	
ENST 5800	Environmental Impact Assessment	
ENST 5820	Sustainability, Climate Change, and Society	
ENST 5870	Soil Quality and Analysis	
ENST 6901	Sources of Contamination	
ENST 6920	Environmental Compliance	
ENST 6999	Special Topics in Environmental Science	
GEOL 5817	Environmental Geochemistry	
GEOL 5810	Groundwater Resource Evaluation	
GEOL 6901	Geology of Ohio and Pennsylvania	
BIOL 6902	Ecology of Lakes	
BIOL 6903	Stream Ecology	
BIOL 6906	Ecosystems Field Ecology	
BIOL 5888	Environmental Biotechnology	
BIOL 5888L	Environmental Biotechnology Laboratory	
CEEN 5837	Environmental Engineering Design	
CEEN 5884	Solid and Hazardous Waste Management	
CEEN 6977	Hydrology	
GEOG 6903	Advanced Geographic Information Science	
Elective hours		6
		or
		9

Experiential Component

For thesis students	s (6sh)	
ENST 6990	Thesis	
For students on TA	(1sh)	
ENST 6905	Teaching Methods in Geology and Environmental Science	
For non-thesis stud	lents (3sh)	
STEM 5890	STEM Graduate Internships	
OR (If internship no	ot taken ENST 6991 Master's Project) (3sh)	
Total Hours		30

No more than nine (15) semester hours from the 5800 level (swing course) may be counted towards the Master of Science degree. (Note: More courses at the 5800 level can be taken, but only 15 s.h. count towards the 30 s.h. required

for the Master's degree). Additional background courses (undergraduate or graduate) may be required as prerequisites for some of the graduate courses. Prerequisites may be waived at the recommendation of the instructor of the course.

Credits earned for the Graduate Certificate in Environmental Studies may be applied to the Master of Science degree to the extent allowed by the College of Graduate Studies (normally nine semester hours). Students in the certificate program, who intend to pursue the Master's degree, must apply to and meet all the requirements for the Environmental Science Master of Science program.

Learning Outcomes

Communicate effectively using the language, concepts, and models of environmental science in written, visual, and numerical formats.

Properly apply the scientific method to research environmental problems and formulate conclusions and recommendations.

Demonstrate ability to apply appropriate field-and laboratory-based methods (of acquiring, quantitatively and qualitatively analyzing and interpreting environmental data and information).

Apply environmental science research as demonstrated by the successful completion of a Master's thesis or Environmental Science-related internship.

Graduate Courses

ENST 5810 Environmental Safety 3 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 5860 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.

ENST 6900 Advanced Environmental Studies 3 s.h.

A study of the principles and issues of environmental science, health, technology, and affairs. Topics will include contaminant chemistry; terrestrial and aquatic ecology; risks to human health; waste management; conservation; and sustainable development, energy, and pollution. Local, regional, and global issues will be studied.

ENST 6901 Sources of Contamination 3 s.h.

A study of the sources and fate and transport of air, water, and soil contaminants that have potential to adversely affect human health and the environment. Topics will include measurement of environmental parameters, data collection and reporting, interpretation of results, compliance issues, and economic implications.

ENST 6905 Teaching Methods in Geology and Environmental Science 2 s.h.

A required course for all Department of Geological and Environmental Sciences graduate teaching assistants. This course will provide guidance and instruction in teaching introductory laboratories in the department.

ENST 6920 Environmental Compliance 3 s.h.

Regulatory compliance concerning operations of environmental and health and safety departments. RCRA permitting (NPDES and air emissions), landfilling, Right to Know, waste generation, storage, shipping (manifests and placarding), disposal of wastes, MSDS, OSHA regulations, safe work practices, hiring consultants (technical and legal), writing requests for proposals, and documenting and report writing.

Prereq.: ENST 5860, ENST 6900, or equivalent.

ENST 6921 Industry/Institutional Management for the Environmental Professional 3 s.h.

A comprehensive background in management principles and operations relating to the environmental professions. Topics include budgeting, staffing, scheduling, leadership, and quality assurance/control. The student will learn to write, evaluate, and implement technical and cost proposals for contracts and grants, scopes of work, operations plans, sampling and analysis plans, health and safety plans, job descriptions, resumes, statements of qualifications, mission statements, meeting agendas (for professionals and the general public), and other written and oral communications (reports, memoranda, memoranda of understanding, policy briefs, press releases, fact sheets, requests for information).

Prereq.: ENST 6900 or equivalent.

ENST 6931 Ecological Risk Assessment 3 s.h.

The student will examine environmental risks to nonhuman populations. Topics will include the study of measurements of adverse effects due to one or more stressors by examining population communities and ecosystems. Also, the class will study the following issues: threatened and endangered species, wetlands, endocrine disruption, multiple stressors, sediment and soil toxicity, conservative screening versus site-specific studies, and natural resource damage claims.

Prereq.: ENST 6900 and ENST 5830 or equivalent.

ENST 6990 Thesis 1-6 s.h.

Hours arranged. Applicable to master's degree in environmental studies. Research selected and supervised by departmental advisor and approved by graduate faculty of environmental studies program and graduate dean. May be repeated.

ENST 6995 Introduction to Environmental Science Research 2 s.h.

This course introduces the student to the fundamental and practical aspects of research, especially as they apply to environmental sciences. The course emphasizes research methodologies and ethics, how to review the literature, how to write a research proposal, and how research results are presented. The course will include presentations of the faculty research interests. **Prereq.:** graduate standing or permission of instructor.

ENST 6999 Special Topics in Environmental Science 1-3 s.h.

Environmental science topics selected by faculty from fields of current research interest or of special emphasis. May be repeated with a different topic up to a total of six semester hours. **Prereq.:** Permission of director.

Master of Science in Mathematics Program Director

Dr. G. Jay Kerns 620 Lincoln Building (330) 941-3310 gkerns@ysu.edu

Program Description

The Department of Mathematics and Statistics offers the M.S. degree in mathematics both traditionally and online. Options for this degree include:

- · predoctoral studies,
- · applied mathematics,
- · computer science,
- · secondary mathematics,
- · statistics, and
- · actuarial science.

Graduate faculty members have a broad range of research interests in both pure and applied areas. The curriculum stresses theoretical as well as computational mathematics and is flexible enough to key a student's program to individual interests and abilities. Receiving a well-rounded education in mathematics, graduates can pursue a Ph.D., secure a position in government or industry, or further a teaching career.

The Department of Mathematics and Statistics also offers a Graduate Certificate in Mathematics and a Graduate Certificate in Data Analytics

Admission Requirements

TITLE

In addition to the minimum College of Graduate Studies admission requirements, students must also have the following:

COURSE

A cumulative undergraduate cumulative grade point average of at least 3.0 (on a 4.0 scale) in all undergraduate mathematics an statistics

courses.

A completed sequ	ence in standard calculus comparable to:	
MATH 1571	Calculus 1	4
MATH 1572	Calculus 2	4
MATH 2673	Calculus 3	4
Previous courses i	in discrete structures and linear algebra comparable to:	
MATH 3715	Discrete Mathematics	3
MATH 3720	Linear Algebra and Matrix Theory	3
Previous courses in abstract algebra and real analysis comparable to:		
MATH 5821	Topics in Abstract Algebra	4
MATH 5851	Topics in Analysis	4

Students not satisfying all of the above may be admitted with provisional status subject to the approval of the graduate program director and the graduate dean. Students may need to complete prerequisite examinations to demonstrate readiness for the core courses. If students do not pass the prerequisite examination, students must complete the prerequisite courses in the earliest available semester. The prerequisite courses are not included in the 30-semester hour minimum requirement.

Graduate Faculty

Jozsi Z. Jalics, Ph.D., Professor

Computational neuroscience; mathematical biology; dynamical systems; partial differential equations

G. Jay Kerns, Ph.D., Professor

Signed measures; infinite divisibility; exchangeability in probability and statistics; applications of stochastic processes

Lucy Xiaojing Kerns, Ph.D., Associate Professor

Simultaneous confidence bands; minimum effective doses; benchmark dose methodology

Thomas L. Madsen, Ph.D., Associate Professor

Abstract algebra; group theory; representation theory

Nguyet Thi Nguyen, Ph.D., Associate Professor Financial models; Monte Carlo simulation; actuarial science

Anita C. O'Mellan, Ph.D., Professor Graph theory; combinatorics; early childhood mathematics education

Alicia Prieto Langarica, Ph.D., Professor Mathematical biology; agent-based modeling

Thomas Smotzer, Ph.D., Professor Real analysis; measure theory; operator theory

Jamal K. Tartir. Ph.D., Professor Set-theoretic topology

S.H.

Padraic ("Paddy") W. Taylor, Ph.D., Associate Professor **Multipoint Boundary Value Problems**

Thomas P. Wakefield, Ph.D., Professor, Chair Character theory; actuarial science

- · A minimum of 30 semester hours of credit excluding MATH 5821 Topics in Abstract Algebra and MATH 5851 Topics in Analysis
- · A cumulative grade point average of at least 3.0
- · Students entering without a prior course in abstract algebra must include MATH 5821 Topics in Abstract Algebra in their program, to be taken in the earliest available semester, and students entering without a prior course in theoretical analysis must include MATH 5851 Topics in Analysis in their program, to be taken in the earliest available semester. Students may need to complete prerequisite examinations in algebra and/or analysis to demonstrate readiness for the core courses. If students do not pass the prerequisite examination, students must complete the prerequisite courses in the earliest available semester. These courses are not included in the 30-semester-hour minimum requirement.
- · The student's combined undergraduate and graduate programs must include a mathematics core comprising the following courses or their equivalent:

COURSE	TITLE	S.H.
MATH 5821	Topics in Abstract Algebra (if needed, taken in the earliest available semester (Does not count toward master's degree))	I
MATH 5851	Topics in Analysis (if needed, taken in the earliest available semester (Does not count toward master's degree))	
MATH 6926	Advanced Linear Algebra	3
MATH 6947	Methods of Applied Mathematics	3
MATH 6952	Analysis of Real Variable Functions	3
Choose one of th	e following:	3
MATH 6996	Mathematical Project	
or STEM 69	99 8 TEM Graduate Internships	
18 Hours of Electives in MATH/STAT/DATX at the 5800 or higher.		18
At least 1 course	must be 6900 level.	
Total Semester H	lours	30

Total Semester Hours

· Satisfactory performance on written and oral examinations. The subject matter for these examinations must be approved by the Graduate Executive Committee. Additionally, the following distribution requirements apply:

- Written exams in MATH 6926, MATH 6947, and MATH 6952
- · Oral exam on thesis, or oral exam on a project and two courses
- · At least half of the hours of the courses examined must be at the 6900 level

- At least 15 hours of the student's approved program must be at the 6900 level.
- MATH 6999 Thesis is highly recommended
- Before completing 12 semester hours, the student must submit the entire degree program for approval and evaluation by the Graduate Executive Committee in the Department of Mathematics and Statistics. Subsequent revisions to this program must be approved by the Graduate Executive Committee. An abstract of a proposed thesis must be submitted for approval prior to registering for the course.
- Students must participate in an exit interview during the semester in which they plan on graduating. The exit interview will be conducted with one or more members of the Graduate Executive Committee and must be scheduled by the student prior to the thesis or project presentation.

Students with particular interests or career goals are advised to choose elective courses based upon the recommendations below.

Predoctoral Studies in Mathematics and/or Applied Mathematics

COURSE	TITLE	S.H.
MATH 6922	Advanced Topics in Group and Ring Theory	3
MATH 6975	Complex Analysis 1	3
MATH 6980	Topology 1	3
STAT 6940	Advanced Data Analysis	3
MATH 6955	Advanced Differential Equations	3
STAT 6943	Mathematical Statistics 1	3

Statistics

COURSE	TITLE	S.H.
STAT 6940	Advanced Data Analysis	3
STAT 6948	Linear Models	3
STAT 6943	Mathematical Statistics 1	3
STAT 6944	Mathematical Statistics 2	3

Actuarial Science

COURSE	TITLE	S.H.
STAT 5802	Theory of Interest	3
STAT 6943	Mathematical Statistics 1	3
STAT 6944	Mathematical Statistics 2	3

Applied Mathematics

COURSE	TITLE	S.H.
MATH 5860	Numerical Analysis 1	3
MATH 6955	Advanced Differential Equations	3
MATH 6957	Partial Differential Equations	3
STAT 6940	Advanced Data Analysis	3
STAT 6943	Mathematical Statistics 1	3

Secondary/Community College Mathematics

COURSE	TITLE	S.H.
STAT 6943	Mathematical Statistics 1	3
STAT 6940	Advanced Data Analysis	3
MATH 6922	Advanced Topics in Group and Ring Theory	3
MATH 6975	Complex Analysis 1	3
MATH 6980	Topology 1	3
Those students seeking certification should consult an advisor in the Department of Teacher Education.		

Computer Science

Students in coursework in computer science in addition to mathematics should plan their graduate program in consultation with advisors in both the Department of Mathematics and Statistics and the School of Computer Science, Information and Engineering Technology.

Accelerated MS Mathematics

Undergraduate students can apply for admission into the accelerated program for the MS in Mathematics after completing 78 semester hours with a GPA of 3.3 or higher. After being admitted into the program, students can take a maximum of nine semester hours of graduate coursework that can count toward both an 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 three hours of graduate coursework can be completed as an undergraduate and used exclusively for graduate credit.

Learning Outcomes

Students will develop and demonstrate the ability to reason mathematically by constructing mathematical proofs and recognizing and analyzing accurate numerical data in appropriate 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, both orally and in writing, by completing a graduate project or thesis involving an investigative mathematical project, together with oral and written examinations.

Students in cooperative doctoral programs will demonstrate their ability to create significant, original mathematics.

Graduate Courses

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.:** Permission of graduate coordinator or department chair.

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.:** C or better in either MATH 3715 or CSCI 3710 and C or better in 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 5849 Computational Methods for Problems in the Physical Sciences 3 s.h.

Use of contemporary computational approaches to conduct research in the physical sciences using Matlab and supercomputers. Algorithm development and formal exercise tasks may vary depending on the stage of the course, student abilities, and the topic under consideration. Provides application of the techniques discussed in the class to real world situations. Cross-Listed: CSCI 5849 and PHYS 5849.

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.:** Permission of graduate coordinator or department chair.

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, MATH 2673H, or MATH 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 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.

MATH 6901 Mathematics Workshop 1-6 s.h.

Intensive study and activity in a topic related to mathematics, its applications, or the teaching of mathematics. May be repeated. Grading is S/U. **Prereq.:** Permission of graduate coordinator.

MATH 6905 College Teaching of Mathematics 1 s.h.

Intensive preparation for teaching lower-level mathematics courses, featuring formal instruction and orientation on teaching issues, evaluated presentations, mentored classroom instruction, and weekly teaching seminars. Topics include course design, policies, syllabi, grading; classroom teaching problems; orientation in Mathematics Assistance Center, specific lowerlevel mathematics courses, online tutorial services. Required of graduate assistants in the Department of Mathematics and Statistics and to be taken each semester the student is a graduate assistant. Grading is S/U. Does not count toward credit in the program.

MATH 6910 Advanced Engineering Mathematics 1 3 s.h.

Theory and solution techniques used in engineering applications. Topics include brief review of ordinary differential equations and linear algebra; vector calculus, integral theorems, complex analysis, series, residue theory, potential theory, special functions, integral transforms, partial differential equations and applications in mathematical modeling.

Prereq.: MATH 3705.

MATH 6911 Advanced Engineering Mathematics 2 3 s.h.

Theory and solution techniques used in engineering applications. Topics include brief review of ordinary differential equations and linear algebra; vector calculus, integral theorems, complex analysis, series, residue theory, potential theory, special functions, integral transforms, partial differential equations and applications in mathematical modeling. **Prereq.:** MATH 6910.

MATH 6915 Mathematical Foundations 3 s.h.

Order-theoretic and monadic foundations of mathematics: ordered structures; topologies; powerset operators of a function; applications to continuity, compactness, algebra, logic, and calculus.

Prereq.: MATH 3721 Abstract Algebra I and MATH 3751 Real Analysis I, or permission of graduate coordinator.

MATH 6922 Advanced Topics in Group and Ring Theory 3 s.h.

A continuation of MATH 5821 with special emphasis on groups acting on sets, Sylow's Theorem and its applications, ring homomorphisms, ideals, and polynomial rings. Credit will not be given for MATH 4822 and MATH 6922. **Prereq.:** MATH 3721 or MATH 5821.

MATH 6923 Advanced Topics in Field Theory 3 s.h.

This course introduces the major results in advanced field theory. These results include splitting fields, algebraic extensions, finite extensions, cyclotomic polynomials, and finite fields. Credit will not be given for MATH 4823 and MATH 6923. **Prereq.:** MATH 4822 or MATH 6922.

MATH 6926 Advanced Linear Algebra 3 s.h.

This advanced linear algebra course will include a study of abstract vector spaces and linear transformations, among other topics. Applications of linear algebra may be included.

Prereq.: MATH 3721 or MATH 5821 or satisfactory score on a Departmental prerequisite examination.

MATH 6936 Advanced Topics and Research in Graph Theory 3 s.h.

This is a research-based course in graph theory that builds upon knowledge learned in MATH 5835. The research process of a mathematician will be introduced and exercised while exploring advanced topics in graph theory and making discoveries through independent research. **Prereq.:** MATH 5835.

MATH 6947 Methods of Applied Mathematics 3 s.h.

This course surveys topics in applied mathematics and may include scaling, perturbation methods, stationary phase analysis, multi-scale asymptotics, transform methods, Green's functions, discrete models, the calculus of variations, or optimization.

Prereq.: Graduate Standing.

MATH 6952 Analysis of Real Variable Functions 3 s.h.

This course covers topics in the analysis of functions, mainly of several variables, and may include uniform convergence of sequences of functions and some consequences, functions on n-space, derivatives in vector spaces, and results such as the mean value theorem, Taylor's formula, inverse mapping theorem, and the implicit mapping theorem.

Prereq.: MATH 3751 or MATH 5851 or satisfactory score on a Departmental prerequisite examination.

MATH 6955 Advanced Differential Equations 3 s.h.

Proofs of existence and uniqueness of nonautonomous, nonlinear equations. Additional topics may include advanced linear systems, partial differential equations, and integral equations.

Prereq.: MATH 3720 and MATH 3705 or permission of graduate coordinator.

MATH 6957 Partial Differential Equations 3 s.h.

An introduction to partial differential equations (PDE) and their applications. The classification of the basic types of linear partial differential equations, development of how boundary and initial conditions affect solutions, exploration, and application of solution techniques for PDEs and explosions in orthogonal functions will be presented.

Prereq.: MATH 3705 and MATH 3720 or equivalent .

MATH 6975 Complex Analysis 1 3 s.h.

Analytic and meromorphic functions of a complex variable, contour integration, the Cauchy-Goursat theorem, Taylor and Laurent series, residues and poles, conformal mapping. Credit will not be given for both MATH 4875 and MATH 6975.

Prereq.: MATH 3751 or permission of graduate coordinator.

MATH 6980 Topology 1 3 s.h.

Basic concepts of topological spaces and mappings between them, including compactness, connectedness, and continuity. Credit will not be given for both MATH 4880 and MATH 6980.

Prereq.: MATH 3721 Abstract Algebra I and MATH 3751 Real Analysis I, or permission of graduate coordinator.

MATH 6981 Topology 2 3 s.h.

Separation, metrization, compactification. Additional topics will be selected from point-set topology, fuzzy topology, algebraic topology, combinatorial topology, topological algebra.

Prereq.: MATH 4880 or MATH 6980, or permission of graduate coordinator.

MATH 6990 Independent Study 1-3 s.h.

Study under the supervision of a staff member. May be repeated. **Prereq.:** Consent of graduate coordinator.

MATH 6995 Special Topics 1-3 s.h.

Specialized topics selected by the staff. May be repeated up to 12 semester hours.

Prereq.: Permission of graduate coordinator and department chair.

MATH 6995Y Special Topics: Biostatistics 1-3 s.h.

MATH 6995Z ST Functions of Real Variable 3 s.h.

MATH 6996 Mathematical Project 1-3 s.h.

Individual research project culminating in a written report or paper, though not as broad in scope as a thesis. May be repeated once if the second project is in a different area of mathematics.

MATH 6999 Thesis 3 s.h.

A student may register for six semester hours in one semester or for three semester hours in each of two semesters.

MATH 7005 Advanced Topics in Categorical Topology 3 s.h.

Content varies with each offering. Implements ideas from MATH 6915, MATH 6980, MATH 6981, and studies categorical methods in topology and related concrete categories. Emphasis on current literature and open questions. May be repeated with approval of graduate coordinator. **Prereq.:** MATH 6915, MATH 6980, MATH 6981, or equivalent, or permission of the graduate coordinator.

MATH 7015 Advanced Topics in Foundations of Topology 3 s.h.

Content varies with each offering, implements ideas from MATH 6915, MATH 6980, MATH 6981, and studies foundations of topology from a variety of viewpoints (algebraic, categorical, logical, order theoretic, powerset theoretic, set theoretic, etc.). Emphasis on current literature and open questions. May be repeated with approval of graduate coordinator.

Prereq.: MATH 6915, MATH 6980, MATH 6981, or equivalent, or permission of graduate coordinator.

MATH 7025 Advanced Topics in General Topology 3 s.h.

Content varies with each offering, implements ideas from MATH 6915, MATH 6980, MATH 6981, and studies various topics in point-set topology. Emphasis on current literature and open questions. May be repeated with approval of graduate coordinator.

Prereq.: MATH 6980, MATH 6981, or equivalent, or permission of graduate coordinator.

MATH 7035 Advanced Topics in Lattice-Valued Topology 3 s.h.

Content varies with each offering. Implements ideas from MATH 6915, MATH 6980, MATH 6981, and studies topology from the standpoint of latticevalued (fuzzy) subsets. Emphasis on current literature and open questions. May be repeated with approval of graduate coordinator.

Prereq.: MATH 6915, MATH 6980, MATH 6981, or equivalent, or permission of the graduate coordinator.

MATH 7045 Advanced Topics in Topological Analysis 3 s.h.

Content varies with each offering. Implements ideas from MATH 6915, MATH 6980, MATH 6981, and studies the overlap between topology and abstract analysis (topological games, topological groups, separate versus joint continuity, etc.). Emphasis on current literature and open questions. May be repeated with approval of graduate coordinator.

Prereq.: MATH 6915, MATH 6980, MATH 6981, or equivalent, or permission of graduate coordinator.

MATH 7055 Seminar in Topology and Abstract Analysis 3 s.h.

Content varies with each offering. Implements ideas from MATH 6915, MATH 6980, MATH 6981, and focuses on current research activities of seminar participants. Student registrants are expected to make at least one major presentation each month of the term. May be repeated with approval of graduate coordinator.

Prereq.: Permission of graduate coordinator.

Master of Science in Education in Counseling

Introduction

The counseling program prepares individuals as professional counselors in the areas of clinical mental health counseling, school counseling, college counseling and student affairs, and addiction counseling. Our program is designed to prepare graduates who have necessary knowledge, skills, and dispositions to best serve in mental health centers, schools, recovery centers, and colleges. Our program is exemplified by the quality and diversity of classroom instruction, field experiences, program options, students, faculty and the outstanding reputation of graduates in the community. The required core courses are those considered to represent basic knowledge and skills essential for professional counselors in all environments. The common CACREP core includes knowledge and skills in:

- · professional orientation and ethics
- · human growth and development
- · social and cultural diversity
- · helping relationships (e.g., counseling theory, counseling methods)
- · career development
- group work
- assessment
- · research and program evaluation

The Counseling Program also maintains the Community Counseling Clinic that provides free or reduced cost counseling services to residents of the Youngstown area. All students in the clinical, school, addiction and college counseling options take one practicum course and counsel clients via the clinic during their first practicum experience. We have a strong connection with alumni, program supervisors, agencies and schools, and community leaders who support the profession of counseling in the Youngstown area.

For more information visit our Department website (https://ysu.edu/ academics/beeghly-college-education/counseling-msed/).

Welcome

Our program is designed to prepare graduates that have necessary knowledge, skills, and dispositions to best serve in mental health centers, schools, recovery centers, and colleges in the area. Our program seeks to meet the Addiction Counseling, Clinical Mental Health Counseling, School Counseling, College Counseling & Student Affairs needs of Northeast Ohio, Western Pennsylvania and other areas of the state/country.

We are CACREP accredited and nationally awarded (i.e., ACES Outstanding Counselor Education Program Award and the NCACES Innovative Counselor Education Program Award). Our program is exemplified by the quality and diversity of classroom instruction, field experiences, program options, students, faculty and the outstanding reputation of graduates in the community. We have a 50 year history and over 2100 master's degree graduates who have served the area as licensed professional clinical counselors, licensed/certified school counselors, licensed/certified chemical dependency counselors, student affairs professionals, professors, agency directors, and public servants. We have a strong connection with alumni, program supervisors, agencies and schools, and community leaders who support the profession of counseling in the Youngstown area. Master's students will find a unique educational experience that prepares them for employment and/or advanced study in Counseling.

Program Director

For specific questions about the Master of Science in Education Counseling program, please contact the program director.

Jake J. Protivnak, Ph.D. Professor Department of Psychological Sciences and Counseling (330) 941-1936 jjprotivnak@ysu.edu

Addiction Counseling

The Addiction Counseling Program prepares students to work in a variety of community settings, including addiction/recovery centers, residential/ community mental health centers, hospitals, employee assistance programs, and private practice. Students are taught to diagnose and treat mental and emotional disorders using a variety of interventions and methods. Students within this program focus on all areas of addiction including drug and alcohol, gambling, sexual, and other process addiction. The Addiction Counseling Program is accredited by the Council for the Accreditation of Counseling and Related Educational Programs (CACREP). Completion of this program will satisfy the educational portion of the requirements for Professional counselor and Professional Clinical Counselor licensure by the Ohio Counselor, Social Worker, and Marriage and Family Therapist Board. In addition to the 63 semester hours of coursework, students complete experiential activities early in the program, a practicum, and a 600-hour internship in one of a variety of addiction settings in Northeast Ohio or Western Pennsylvania.

Clinical Mental Health Counseling

The Clinical Mental Health Counseling Program prepares students to work with children, adolescents, and/or adults and are employed in a variety of settings, including:

- · community mental health centers
- hospitals
- addiction/recovery centers
- employee assistance programs
- private practices

Students are taught to diagnose and treat mental and emotional disorders using a variety of interventions and methods. Students are also taught ways to facilitate clients' growth and wellness, and how to help people live optimally as they move through developmental changes. The Clinical Mental Health Counseling program is accredited by the Council for the Accreditation of Counseling and Related Educational Programs (CACREP). A completed 600hour internship in an appropriate community setting is required. Students interested in clinical mental health counseling complete a 60-semester-hour curriculum that is recognized by the state of Ohio's Counselor, Social Worker, and Marriage and Family Therapist Board. The curriculum enables graduates to pursue Ohio Professional Counselor licensure and Professional Clinical Counselor licensure. Students seeking counselor licensure in other states, such as Pennsylvania, have the responsibility to ensure that they meet the requirements of those particular states.

School Counseling

The School Counseling option prepares students to work in public or private K-12 education settings. The program is designed to help students with or without teaching backgrounds to support the academic, career, and personal/ social development of all students within a school system. The program has an urban focus and seeks to prepare students who understand the impact of poverty and culture on disenfranchised populations. The School Counseling program is accredited by the Council for the Accreditation of Counseling and Related Educational Programs (CACREP). The program meets the education

requirements for school counselor licensure in the state of Ohio. Students seeking school counselor licensure who do not have teacher certification in Ohio must have completed an approved school counseling program with a one-year induction process. Students must also pass the school counseling exam for the State of Ohio or any other state required standardized testing. In addition to the 60 semester hours of coursework, students complete experiential activities early in the program, a practicum, and a 600-hour internship in one of a variety of school counseling settings in Northeast Ohio or Western Pennsylvania. Students seeking school counselor licensure/ certification in other states, such as Pennsylvania, have the responsibility to ensure that they meet the requirements of those particular states.

College Counseling and Student Affairs

The College Counseling & Student Affairs program option prepares entry level college counselors and student affairs practitioners with the knowledge, skills, and practical experiences to facilitate the learning and development of college students. Preparation is guided by an understanding of college counseling and student affairs history and research, college student development theory, legal and ethical issues, college student diversity, current issues, administrative and leadership components, assessment practices, and an understanding of the dynamic nature of higher education. The College Counseling and Student Affairs program is accredited by the Council for the Accreditation of Counseling and Related Educational Programs (CACREP). Graduates from the College Counseling & Student Affairs program option pursue careers as professionals at college and universities across the country. Individuals who complete the 60 hour non-licensure options are prepared to work in a host of functional areas in higher education such as: housing, admissions, advising, career centers, international centers, diversity and inclusion centers, etc.). Recent graduates have been:

- academic advisors
- career services coordinators
- international recruiters
- residence directors
- area coordinators
- directors of residence life
- directors of student activities
- faculty members

Individuals who complete the 60 hour licensure option are prepared to work with college students in community mental health centers, hospitals, addiction/recovery centers, employee assistance programs and private practices. Individuals are taught to diagnose and treat mental and emotional disorders using a variety of interventions and methods. Completion of the 60 semester hour licensure track will satisfy the educational portion of the requirements for licensure as a Professional Counselor and a Professional Clinical Counselor by the Ohio Counselor, Social Worker, and Marriage and Family Therapist Board. Individuals complete experiential activities early in the program, a practicum, and a 600-hour internship in one of a variety of college and university settings in Northeast Ohio or Western Pennsylvania.

Mission

The mission of the Counseling Program is to educate students, and to help them develop into counselors and related professionals who are sensitive to the impacts of human development, culture, and context upon students and consumers of counseling services; who are caring and compassionate counselors and people; who are self-reflective; who promote opportunity and social justice for the impoverished urban and rural populations; and, who are committed to empowering consumers of counseling services to thrive, and to achieve their fullest potential.

The Counseling Program advocates equality of opportunity for all persons. The curriculum and all educational experiences are designed to educate counselors in understanding and applying various counseling methods and techniques to aid a multicultural and diverse population with psychological, educational, vocational, and personal concerns. The Counseling Program fosters a learning environment that is challenging for both personal and professional development, humane in its emphasis upon respect for the dignity and worth of the individual, and realistic through its emphasis upon integration of academic, clinical, and field-based learning.

Program faculty are involved in scholarship, and university, professional, and community service, and to use those involvements to mentor students, to enhance students' learning experiences, to serve the community, the counseling profession, and consumers of counseling services who reside in northeast Ohio.

Accreditation

The Counseling Program emphasizes high standards of professional competence. The Counseling Program continues to remain committed to its stated mission through ongoing accreditations by the Council for Accreditation of Counseling and Related Educational Programs (CACREP). The Counseling Program also emphasizes ethical practice and keeps with state and national standards for certification and licensure for practice in educational, mental health and social service environments. The Counseling Program has full approval by the Ohio Counselor, Social Worker, and Marriage and Family Therapists Board (OCSWMFT), and the Ohio Department of Education (ODE). The Counseling Program engages in ongoing program development and refinement based on accrediting bodies' and licensure boards' developments and recommendations, and sensitivity to licensure requirements and legal and ethical issues is a priority.

Our program is fully accredited by CACREP through 2031.

Admission Requirements

Students from a variety of undergraduate majors (i.e. psychology, social work, education, communication, sociology, religion, philosophy, business, general studies, etc.) may pursue a master's degree in counseling. Undergraduate and/or graduate grade point average, a letter of intent, name and contact information of references, and a required interview are important factors in determining the admissibility of an applicant to the counseling degree program. Applicants will be interviewed by members of the Counseling Admissions Committee and must meet the standards prescribed in the counseling program's admission policies. The following are the admission requirements:

- Applicants must have earned above a 2.7 grade-point average. (If an applicant's GPA is slightly below the minimum required, an applicant may include a GRE or MAT score to have their application reviewed.)
- Letter of Intent (approximately 4 pages double-spaced) with response to the following items:
- What factors are motivating you to pursue a masters degree in Counseling at this time?
- Please give an example of when you have determined to make desired changes in your life. What motivated you to seek this change and what obstacles did you overcome?
- What do you believe are the most important counseling skills for helping a culturally-different individual?
- The Counseling Program offers four (4) options; Addiction Counseling, Clinical Mental Health Counseling, School Counseling, and College Counseling/Student Affairs. Which Counseling Program option(s) are you most interested in pursuing? What is your motivation to specialize in this area and what type of work would you like to be doing in 5 years?
- Names and contact information of three references, at least two of which should be current or former faculty
- · Official transcripts of all undergraduate or graduate work completed
- Counseling Interview
- · Application Deadlines:

Fall: June 15th

Spring: October 15th

Summer: March 15th

Graduate Faculty

The following are core counselor education program faculty:

Victoria E. White Kress, Ph.D., Professor

Self-injurious behavior; complex psychological trauma; child abuse, domestic violence, rape/sexual trauma survivors; DSM; strength-based/creative counseling interventions

Kenneth L. Miller, Ph.D., Professor

Measurement of cultural bias and discrimination; child abuse; technology use in clinical supervision; gender equity

Jake J. Protivnak, Ph.D., Professor

Counselor education; supervision; adolescent/college student interventions

Students are required to complete appropriate coursework for their program option, including satisfactory completion of the counseling comprehensive examination. Comps exams for licensure area student must be completed prior to beginning their field placements. Coursework related to specialized cognate areas serve to enhance each program option.

Twelve semester hours of internship are required. Since this requirement entails 20 hours per week at the internship site, students who are employed full time may need to arrange for accommodations with their employers to fulfill this requirement.

Addiction Counseling Program Curriculum

- Internship placement involves a minimum of 600 clock hours completed over two semesters. COUN 7002 Clinical Mental Health Counseling Practicum 2 is to be completed the semester immediately prior to beginning the internship. Students are to apply for their field placement for the fall or summer semesters no later than the fourth week of the spring semester. (Application forms are online and should be submitted to the internship coordinator.) If a student would like to begin his or her field placement in the spring semester, the student should apply no later than the fourth week of the fall semester. Students who fail to submit their field placement application form by the deadline will not be permitted to complete their field placement during the specified semester. For further information refer to the appropriate *Fieldwork Handbook*.
- Not all courses are offered every semester. It is the student's responsibility to carefully plan his or her program of study in order to meet all prerequisite course and graduation requirements.
- All candidates are required to purchase a Task Stream account to complete the critical task for each courses which is essential for the CACREP accreditation.

COURSE Required Courses	TITLE	S.H.
COUN 6920	Orientation and Ethical Issues in Clinical Mental Health Counseling	3
COUN 6900	Counseling Methods and Practice	3
COUN 6902	Theory and Foundation of Addictions Counseling	3
COUN 6903	Addictions Counseling: Treatment and Intervention	3
COUN 6962	Counseling Theory	3
COUN 6940	Human Growth and Development	3
COUN 6964	Appraisal Techniques in Counseling	3
COUN 6968	Research in Counseling	3
COUN 6972	Career Counseling	3
COUN 6973 & 6973L	Group Counseling Theory and Practice and Guided Group Counseling	3
COUN 6976	Social and Cultural Issues in Counseling	3

Total Semester Ho	urs	63
COUN 7020	Field Experience Supervision	3
COUN 7020	Field Experience Supervision	3
COUN 7010	Clinical Mental Health Counseling Internship Seminar (Two semesters) $^{\rm Concurrent\ with\ COUN\ 7020}$	6
Internship		
COUN 7043	Counseling Techniques	
COUN 7040	Principles and Techniques in Counseling Supervision	
COUN 7023	College Student Development	
COUN 7018	Diagnosis and Treatment of Children and Adolescents	
COUN 7003	Counseling Children and Adolescents	
COUN 6995	Trauma and Crisis Counseling	
COUN 6930	College Counseling and Student Mental Health	
Elective (Select on	e of these courses)	3
COUN 6991	Family Systems Counseling	3
COUN 7031	Clinical Psychopathology and Treatment	3
COUN 7002	Clinical Mental Health Counseling Practicum 2	3
COUN 7001	Counseling Practicum 1	3
or COUN 7018	Diagnosis and Treatment of Children and Adolescents	
COUN 6980	Diagnosis of Mental Disorders	3

Comprehensive examination prerequisites

COURSE	TITLE	S.H.
COUN 6900	Counseling Methods and Practice	3
COUN 6920	Orientation and Ethical Issues in Clinical Mental Health Counseling	3
COUN 6940	Human Growth and Development	3
COUN 6962	Counseling Theory	3
COUN 6964	Appraisal Techniques in Counseling	3
COUN 6968	Research in Counseling	3
COUN 6972	Career Counseling	3
COUN 6973 & 6973L	Group Counseling Theory and Practice and Guided Group Counseling	3
COUN 6976	Social and Cultural Issues in Counseling	3

Clinical Mental Health Counseling Program Curriculum

- Internship placement involves a minimum of 600 clock hours completed over two semesters. COUN 7002 Clinical Mental Health Counseling Practicum 2 is to be completed the semester immediately prior to beginning the internship. Students are to apply for their field placement for the fall or summer semesters no later than the fourth week of the spring semester. (Application forms are online and should be submitted to the internship coordinator.) If a student would like to begin his or her field placement in the spring semester, the student should apply no later than the fourth week of the fall semester. Students who fail to submit their field placement application form by the deadline will not be permitted to complete their field placement during the specified semester. For further information refer to the appropriate *Fieldwork Handbook*.
- Not all courses are offered every semester. It is the student's responsibility to carefully plan his or her program of study in order to meet all prerequisite course and graduation requirements.
- 3. All candidates are required to purchase a Task Stream account to complete the critical task for each courses which is essential for the CACREP and CAEP accreditation.

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Comprehensive examination prerequisites

COURSE	TITLE	S.H.
COUN 6920	Orientation and Ethical Issues in Clinical Mental Health Counseling	3
COUN 6900	Counseling Methods and Practice	3
COUN 6940	Human Growth and Development	3
COUN 6962	Counseling Theory	3
COUN 6964	Appraisal Techniques in Counseling	3
COUN 6968	Research in Counseling	3
COUN 6972	Career Counseling	3
COUN 6973 & 6973L	Group Counseling Theory and Practice and Guided Group Counseling	3
COUN 6976	Social and Cultural Issues in Counseling	3

School Counseling Program Curriculum

 Internship placement involves a minimum of 600 clock hours completed over two semesters. COUN 7007 School Counseling Practicum 2 is to be completed in the fall semester immediately prior to beginning internship. Students are to apply for their field placement for the fall or summer semesters no later than the fourth week of the spring semester. (Application forms are online and should be submitted to the internship coordinator.) Students who fail to submit their field placement application form by the deadline will not be permitted to complete their field placement during the specified semester. For further information refer to the appropriate Fieldwork Handbook.

- 2. Internships must be completed in approved educational settings. In order to provide a comprehensive experience, Practicum II/Internship are only offered beginning in the fall semester of the final year in the program. This experience is comprised of 750 supervised hours in an approved setting in an August through June format.
- 3. Not all school counseling courses are offered every semester. Students are responsible for carefully planning their programs of study in order to meet all prerequisite course and graduate requirements.
- 4. Students are required to purchase a Task Stream account to complete the critical tasks for each course which is essential for CACREP and CAEP.

COURSE	TITLE	S.H.
Required Courses		
COUN 6900	Counseling Methods and Practice	3
COUN 6940	Human Growth and Development	3
COUN 6961	Orientation and Ethical Issues in School Counseling (take within the first 3 semesters)	3
COUN 6962	Counseling Theory	3
COUN 6964	Appraisal Techniques in Counseling	3
COUN 6968	Research in Counseling	3
COUN 6972	Career Counseling	3
COUN 6973 & 6973L	Group Counseling Theory and Practice and Guided Group Counseling	3
COUN 6976	Social and Cultural Issues in Counseling	3
COUN 6991	Family Systems Counseling	3
COUN 7001	Counseling Practicum 1	3
COUN 7003	Counseling Children and Adolescents	3
COUN 7018	Diagnosis and Treatment of Children and Adolescents	3
COUN 7019	School Counseling Program Development	3
COUN 7007	School Counseling Practicum 2	3
Elective (Select or	ne of these courses)	3
COUN 6902	Theory and Foundation of Addictions Counseling	
COUN 6903	Addictions Counseling: Treatment and Intervention	
COUN 6930	College Counseling and Student Mental Health	
COUN 6995	Trauma and Crisis Counseling	
COUN 7023	College Student Development	
COUN 7031	Clinical Psychopathology and Treatment	
COUN 7040	Principles and Techniques in Counseling Supervision	
COUN 7043	Counseling Techniques	
Internship		
COUN 7009	School Counseling Internship Seminar (Two semesters)	6
COUN 7020	Field Experience Supervision Concurrent with COUN 7009	6
Total Semester Ho	Durs	60

Comprehensive examination prerequisites

COURSE	TITLE	S.H.
COUN 6900	Counseling Methods and Practice	3
COUN 6961	Orientation and Ethical Issues in School Counseling	3
COUN 6940	Human Growth and Development	3
COUN 6962	Counseling Theory	3
COUN 6964	Appraisal Techniques in Counseling	3
COUN 6968	Research in Counseling	3
COUN 6972	Career Counseling	3

COUN 6973	Group Counseling Theory and Practice	4
& 6973	and Group Counseling Theory and Practice	
COUN 6976	Social and Cultural Issues in Counseling	3

College Counseling and Student Affairs Program Curriculum

- 1. Internship placement involves a minimum of 600 clock hours completed over two semesters. COUN 7004 Practicum in Student Affairs (for nonlicensure students) and COUN 7002 (for licensure students) is to be completed immediately prior to beginning internship. Students are to apply for their field placement (note: application forms are in the central office and should be turned in to the internship coordinator) for the fall or summer semesters no later than the fourth week of the spring semester.
- 2. Not all courses are offered every semester. It is the student's responsibility to carefully plan his/her program of study in order to meet all prerequisite course and graduation requirements.

Required Courses COUN 6900 COUN 6930 COUN 6962 COUN 6940	Counseling Methods and Practice College Counseling and Student Mental Health Counseling Theory	3
COUN 6930 COUN 6962 COUN 6940	College Counseling and Student Mental Health	
COUN 6962 COUN 6940	5 5	
COUN 6940	Counseling Theory	3
	counselling meory	3
001101 0000	Human Growth and Development	3
COUN 6968	Research in Counseling	3
COUN 6972	Career Counseling	3
COUN 6973 & 6973L	Group Counseling Theory and Practice and Guided Group Counseling	3
COUN 6976	Social and Cultural Issues in Counseling	3
COUN 7001	Counseling Practicum 1	3
COUN 7021	Legal and Ethical Issues in Student Affairs ¹	3
COUN 7023	College Student Development	3
COUN 7026	Orientation and Functions of Student Affairs (take within the first 3 semesters)	3
COUN 7044	Leadership and Administration in Student Affairs ¹	3
COUN 7046	Assessment in Student Affairs Practice ¹	3
Practicum/Interns	hip ¹	
COUN 7004	Practicum in Student Affairs (permit required) ¹	3
COUN 7005	Student Affairs Internship Seminar ¹	3
COUN 7020	Field Experience Supervision Concurrent with COUN 7005	1
Ohio Licensure Op		
COUN 6920	Orientation and Ethical Issues in Clinical Mental Health Counseling	
COUN 6964	Appraisal Techniques in Counseling	
COUN 6980	Diagnosis of Mental Disorders	
COUN 7031	Clinical Psychopathology and Treatment	
Non-Licensure Stu	udent Electives (Select one of these courses) 1 & 2	3
COUN 6902	Theory and Foundation of Addictions Counseling	
COUN 6903	Addictions Counseling: Treatment and Intervention	
COUN 6995	Trauma and Crisis Counseling	
COUN 6991	Family Systems Counseling	
COUN 7043	Counseling Techniques	
Practicum /Interns	ship ²	
COUN 7002	Clinical Mental Health Counseling Practicum 2	3
COUN 7010	Clinical Mental Health Counseling Internship Seminar (Two semesters)	6
COUN 7020	Field Experience Supervision Concurrent with COUN 7010	6

- ¹ COUN 7004 Practicum in Student Affairs and COUN 7005 Student Affairs Internship Seminar will be the practicum and internship courses for nonlicensure students.
- ² Ohio Licensure Option will complete the CMHC practicum/internship coursework. Specifically, licensure students will take COUN 7002, COUN 7010, and COUN 7020 for practicum and internship. In addition, COUN 7021, COUN 7044 and COUN 7046 will not be required for licensure students.

Comprehensive examination prerequisites

COURSE	TITLE	S.H.
COUN 7026	Orientation and Functions of Student Affairs	3
or COUN 6920	Orientation and Ethical Issues in Clinical Mental Health Counseling	I
COUN 6900	Counseling Methods and Practice	3
COUN 6940	Human Growth and Development	3
COUN 6962	Counseling Theory	3
COUN 7046	Assessment in Student Affairs Practice	3
or COUN 6964	Appraisal Techniques in Counseling	
COUN 6968	Research in Counseling	3
COUN 6972	Career Counseling	3
COUN 6973 & 6973L	Group Counseling Theory and Practice and Guided Group Counseling	3
COUN 6976	Social and Cultural Issues in Counseling	3

C Grade Policy

A student must maintain a minimum of a "B" average (3.0 on a 4-point scale) in all academic work completed to be awarded a degree. A student who earns a "C" or lower in any course will be required to retake the course. A student earning more than one C grade or lower (i.e., D or F) will be removed from the program. A student who earns a C in any practicum or internship course will not be permitted to move to the next level of the field placement sequence (e.g., Practicum 2, or Internship) and will be required to re-take the course in which the grade was earned. A student who earns a D or F in a practicum or internship course may be dismissed from the program. In these situations, the faculty will review the case and determine if the severity of the situation warrants removal from the program.

Learning Outcomes

- 1. Students will demonstrate an understanding of CACREP's eight core foundational knowledge areas.
- 2. Students will demonstrate the ability to use foundational counseling techniques/ micro-skills
- 3. Students will demonstrate professionalism, professional identity, and fitness to practice as a professional counselor.
- 4. Students will demonstrate knowledge in specific program areas (i.e., Clinical Mental Health, School, College Counseling and Student Affairs)

Graduate Faculty

COUN 6900 Counseling Methods and Practice 3 s.h.

Methods and practices of professional counseling relative to relationship, goals, process, and documentation. Relevant ethical guidelines are stressed. Includes experiential skill training. For counseling majors or by permission of Department of Counseling.

COUN 6902 Theory and Foundation of Addictions Counseling 3 s.h. This course provides a comprehensive overview of chemical dependency and process addictions. There will be an emphasis on all aspects of addiction, including etiology, classification, physiological effects of substances, theory, assessment, interventions, and recovery models. **COUN 6903** Addictions Counseling: Treatment and Intervention 3 s.h. Knowledge, skills, and practice related to chemical dependency and process addictions. There will be an emphasis on assessment, models for treatment, and skills necessary to work in addiction/prevention programs in diverse settings.

COUN 6904 Crisis Counseling 3 s.h.

An overview of the professional concerns and issues school psychologists face working in public school systems. Orientation and preparation for the supervised internship experience will be discussed; future responsibilities as a professional and staff consultant. Legal and ethical issues pertaining to the role of a school psychologist will be reviewed.

COUN 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.

COUN 6910 Human Development and Family Systems Counseling 3 s.h. The purpose of this course is to provide students with the content knowledge of human development and systems theory in order to become effective in helping individuals and families change. Major theoretical approaches to life span development and family counseling will be addressed.

COUN 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).

COUN 6920 Orientation and Ethical Issues in Clinical Mental Health 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.

COUN 6930 College Counseling and Student Mental Health 3 s.h.

This course provides students with an overview of the field of college counseling. The course addresses the following topics: history, philosophy, theories, cultural dynamic, technology applications, assessment and evaluation responsibilities, legal and ethical issues, and current trends in college counseling settings. The college counselor's role, function, and professional identity as a student advocate, program coordinator, individual/ group counselor, and prevention specialist is addressed.

COUN 6940 Human Growth and Development 3 s.h.

The goal of this course is to help students develop an understanding of the theories and concepts associated with human growth and development, specifically in regard to how they relate to counseling. Students will develop an understanding of development through life through a study of research and discussion of development theories. An understanding of the biosocial aspects of development specifically using Erikson's and other theories will occur. The application of this information will be stressed due to its crucial role in the development of determining normal versus abnormal as well as the utilization of appropriate treatment goals and plans.

COUN 6961 Orientation and Ethical Issues in School Counseling 3 s.h.

This course provides students with an introduction to the field of professional counseling, and the foundations of school counseling. The course addresses the following topics: history, philosophy, cultural dynamics, advocacy, consultation, technology applications, classroom management issues, and trends in professional and school counseling. The counseling profession's ethical standards are also addressed with an emphasis on the American Counseling Association (ACA) and American School Counselor Association (ASCA) code of ethics, and counselor ethical decision-making processes.

COUN 6962 Counseling Theory 3 s.h.

Basic principles of counseling in an educational context. Development of procedural bases for counseling and educationally oriented counseling theory. Ethics and limitations involved in counseling practices.

COUN 6963 Occupational and Educational Information in Guidance 2 s.h.

Principles of career development and use of educational and occupational information resources in the guidance program. Lecture and discussion are used to explore occupational structure of the United States, sources of educational and occupational information including community resources, and the collecting, classifying, filing, and organization of educational and occupational information for use in the guidance program.

COUN 6964 Appraisal Techniques in Counseling 3 s.h.

Overview of the administration, scoring, and interpretation of standardized tests and measures used in counseling practice with specific focus and supervised practice in the administration and interpretation of standardized ability, interest, intelligence, and aptitude tests.

COUN 6965 Applied Testing in Career Counseling 2 s.h.

Administration, scoring, and interpretation of selected assessment tools and their application to career counseling. **Prereq.:** COUN 6964.

COUN 6968 Research in Counseling 3 s.h.

The study and application of quantitative and qualitative research in counseling with statistical application component.

COUN 6969 Administration of Personnel and Guidance Services 2 s.h.

A comprehensive study of the dynamic qualities inherent in planning, management, functioning, and structuring of personnel and guidance services in public schools.

COUN 6970 Counseling and Social Services in the Schools 2 s.h.

Examines the scope and comprehensive developmental programs for counseling and social services in the schools with consideration of need assessment and development of such programs.

COUN 6971 Human Relations for the Classroom 2 s.h.

The course focuses on skill development in human relations. These skills are studied and integrated with cognate skill development in the classroom, classroom planning and organization conflict resolution, and coping with behavior problems and motivation. Application is made to the classroom environment.

COUN 6972 Career Counseling 3 s.h.

Theories of vocational choice, vocational success and satisfaction, decision making, and vocational testing. Career counseling as related to the economic and social context.

COUN 6973 Group Counseling Theory and Practice 2 s.h.

Theories pertaining to group dynamics, process, interaction, consultation, and counselor intervention. For counseling majors or by permission of Department of Counseling.

COUN 6975 Counselor Consultation and Prevention 3 s.h.

This course is a study of the theoretical models of consultation and prevention. Techniques for implementation of consultation and prevention in schools, agencies, and higher education settings will be presented.

COUN 6976 Social and Cultural Issues in Counseling 3 s.h.

Counseling theory and techniques related to social and economic change, ethnic groups, subculture, issues of sexuality and gender, urban and rural societies, cultural mores, the use of leisure time, and differing life patterns.

COUN 6977 College Admission Counseling 3 s.h.

This course provides practical information on advising student and parents about the college admission process. The course is designed to promote career advisement knowledge and skills related to: consultation with parents, drop out prevention, student motivation, academic/career preparation, assessment, application process, financial aid, and interventions to enhance student and parents decisions regarding college admission process.

COUN 6980 Diagnosis of Mental Disorders 3 s.h.

Overview of Diagnostic and Statistical Manual of Mental Disorders, fourth edition (DSM-IV-TR) format, with emphasis placed on the development of diagnostic skills for the major mental and emotional disorders commonly encountered in social service, educational, and community counseling agencies.

COUN 6982 Educational Leadership in Primary and Intervention Strategies 2 s.h.

This course will identify mental health issues that impact individuals, families, and the educational system. Prevention and intervention strategies will be explored, as well as issues and procedures of referral.

COUN 6990 Independent Study 1-3 s.h.

Individual investigation of advanced topics under guidance of selected staff. Permission of instructor required. Special approval required.

COUN 6991 Family Systems Counseling 3 s.h.

Systems theory as applied to family functioning. Major theoretical approaches to family counseling, including ethics and techniques, will be addressed.

COUN 6995 Trauma and Crisis Counseling 3 s.h.

This course features an overview of the impact of traumatic events and crises on individuals, families, and communities. Models and theories of intervention and response are addressed. The psychological impacts and needs of those who have experienced diverse trauma experiences will be examined (e.g., victims of child abuse, interpersonal partner violence, sexual assault). Contemporary issues associated with trauma and crisis counseling will be explored (e.g., crisis assessment, vicarious trauma and countertransference, cultural and legal/ethics issues related to trauma counseling).

COUN 7001 Counseling Practicum 1 3 s.h.

Supervised individual counseling practice with volunteer clients. Focus upon process, clarification, and resolution of counselee goals and counselor self-awareness/evaluation. Students are required to attend a scheduled orientation in the Community Counseling Clinic prior to the first class. **Prereq.:** COUN 6900 and (COUN 6920, COUN 6961, or COUN 7026).

COUN 7002 Clinical Mental Health Counseling Practicum 2 3 s.h.

Supervised individual and group counseling practices in settings appropriate to student's programs. Requires field placement of 150 hours. Special approval required.

Prereq.: COUN 7001, no PR grades, successful completion of counseling program comprehensive exam, and permission of program area internship coordinator.

COUN 7003 Counseling Children and Adolescents 3 s.h.

Various theories and respective techniques for counseling and psychotherapy with children and adolescents. Research concerning the efficacy of such approaches will also be studied. Special approval required.

COUN 7004 Practicum in Student Affairs 3 s.h.

This course will provide an orientation to the student services division, as well as offering students the opportunity to gain experience in a higher education setting. The program component will include individual and group supervision, as well as supervised field experience.

Prereq.: Special approval required.

COUN 7005 Student Affairs Internship Seminar 3 s.h.

This course will provide a weekly supervision and 600 hours of supervised field experience for student affairs students. The internship supervision is designed to promote the integration of theory and practitioner experiences for students in a higher education setting and to help students prepare for the transition to a professional student affairs position following completion of the degree. **Prereq.:** COUN 7004.

Coreq.: COUN 7020.

COUN 7006 Guidance in the Classroom 2 s.h.

Studies various factors important to a facilitative climate in the classroom and activities through which elementary counselors and teachers can provide these conditions. Considered as classroom management and discipline techniques based upon learning theory, implementation of democratic group structure for elementary school classrooms, and organized activities designed to promote the development of self-understanding and understanding of others in the child's world. The course requires extensive reading and review of published materials designed for classroom guidance in addition to observation of classrooms and role playing experiences.

COUN 7007 School Counseling Practicum 2 3 s.h.

Supervised individual and group counseling practices in school counseling. Requires field placement of 150 hours. Special approval required. **Prereq.:** COUN 7001, no PR grades, successful completion of department comprehensive exam, and permission of instructor.

COUN 7008 Assessment for Educational Decision Making 2 s.h.

Assessment procedures used for making leadership decisions in the educational setting. Emphasis on community assessment, identifying high-risk students, and the development of guidance and state testing programs.

COUN 7009 School Counseling Internship Seminar 3 s.h.

Supervised internship in approved school counseling programs. May be repeated. For counseling majors. **Prereq.:** COUN 7007. **Coreq.:** COUN 7020.

COUN 7010 Clinical Mental Health Counseling Internship Seminar 3 s.h. Supervised internship in approved community agencies offering counseling and other mental health services. May be repeated. For counseling majors. **Prereq.:** COUN 7002.

Coreq.: COUN 7020.

COUN 7013 Topical Seminar in Counseling 1-3 s.h.

The course is for practicing counselors and counselor trainees and will include a survey of literature in counseling, contemporary issues, individual and small group study of special problems chosen by staff, for example, research in counseling, counselor values, and the counseling process; student values and drug abuse; team approach to counseling services; etc. May be repeated to a maximum of 10 semester hours.

COUN 7014 Topical Seminar in Counseling 1-3 s.h.

The course is for practicing counselors and counselor trainees and will include a survey of literature in counseling, contemporary issues, individual and small group study of special problems chosen by staff, for example, research in counseling, counselor values, and the counseling process; student values and drug abuse; team approach to counseling services; etc. May be repeated to a maximum of 10 semester hours.

COUN 7015 Topical Seminar in Counseling 1-3 s.h.

The course is for practicing counselors and counselor trainees and will include a survey of literature in counseling, contemporary issues, individual and small group study of special problems chosen by staff, for example, research in counseling, counselor values, and the counseling process; student values and drug abuse; team approach to counseling services; etc. May be repeated to a maximum of 10 semester hours.

COUN 7018 Diagnosis and Treatment of Children and Adolescents 3 s.h. Overview of Diagnostic and Statistical Manual of Mental Disorders, fifth edition, text revision (DSM-V-TR) with an emphasis placed on the development of diagnostics skills for the major mental disorders commonly encountered in social service, educational, and community counseling agencies. The course will additionally focus on the development of diagnostic skills and treatment strategies for working with children and adolescents.

COUN 7019 School Counseling Program Development 3 s.h.

This course provides students with a comprehensive framework for planning, designing, implementing, evaluating, and enhancing content-based and comprehensive developmental counseling programs. The course is designed to promote knowledge and skills related to: prevention and crisis intervention strategies; use of a student information system to collect, analyze, and evaluate data in order to improve student outcomes; integration of the school counseling program into the total school curriculum to assist preK-12 students.

COUN 7020 Field Experience Supervision 3 s.h.

University faculty supervised internship experience in selected counselingrelated settings. Students are supervised by the university-based supervisor during the internship field experience. Faculty provide regular weekly feedback on intern participation in field experience, conduct field-based supervision visits, and evaluate counseling skills delivered at the field site. **Prereq.:** COUN 7002, COUN 7004, or COUN 7007. **Coreq.:** COUN 7005, COUN 7009, or COUN 7010.

COUN 7021 Legal and Ethical Issues in Student Affairs 3 s.h.

This course is designed to provide graduate students with an introduction to the legal and ethical issues which affect higher education and student affairs practice. The primary goal of this course is to provide an exploration and understanding of legal issues pertaining to the various constituents of colleges and universities (students, faculty, and administrators).

COUN 7023 College Student Development 3 s.h.

The purpose of this course is to provide an introduction to the field of college student and human development across the life span. Students will be exposed to a range of human development theories and student characteristics that offer insight into the processes of student learning, growth, and development. Special focus will be directed toward understanding patterns of growth and change during the college years for different student subgroups and the implications of these changes for the practices of student affairs and college counseling.

COUN 7026 Orientation and Functions of Student Affairs 3 s.h.

The primary purpose of this course is to provide students with a comprehensive introduction to the functional areas of student affairs. The application of a counseling-based knowledge and skills for student affairs practitioners will be emphasized.

COUN 7028 Advanced Counseling Theory and Treatment Seminar 3 s.h. Research and discussion on selected counseling theories (e.g., Adler, Rogers, Ellis, Carkhuff, Berne) chosen by staff. May be repeated.

COUN 7029 Professional Issues in Student Affairs 3 s.h.

The purpose of this course is to expose graduate students to contemporary issues shaping student affairs practice. Topics will vary but will focus on the development of knowledge and skills in emerging areas relevant to professionals in student affairs (e.g., enrollment management, retention, assessment, finance and budget, grant writing).

COUN 7030 Human Relations Training for School Personnel 2 s.h. Designed to improve the interpersonal relationships of administrators, counselors, teachers, and other professional staff. Objectives include examination of personal communication styles, the effect of the individual on task groups, and increasing leadership potential. For counseling majors or permission of Department of Counseling.

COUN 7031 Clinical Psychopathology and Treatment 3 s.h.

Counseling theories of abnormal behavior and mental disorders throughout the total life cycle. Specific personality theories and examinations of empirically-derived treatments will be included. **Prereg.:** COUN 6962.

COUN 7032 Clinical Intellectual Testing 3 s.h.

Supervised practice in the administration and interpretation of standardized intelligence and aptitude tests. **Prereq.:** COUN 6964.

COUN 7033 Personality Objective/Projective Assessment 3 s.h.

Supervised practice in the administration and interpretation of standardized objective and projective measures of personality. **Prereq.:** COUN 6964.

COUN 7034 Advanced Evaluation of Mental and Emotional Status 3 s.h.

This course provides an advanced overview of the administration and interpretation of intelligence and personality tests. The course is designed to assist the student in becoming aware of testing procedures, testing practices and professional issues concerning the topic of assessment and to provide the student with practical assessment skills applicable to counseling. **Prereq.:** COUN 6964.

COUN 7036 Consultation and Educational Approaches to Prevention 2 s.h.

The study of consultation theory and models. Educational approaches to prevention of substance abuse, child abuse, family and marriage problems, etc. will be included.

COUN 7037 Counseling and Psychopharmacological Treatments of Mental and Emotional Disorders 3 s.h.

The study of pharmacological, behavioral, cognitive, and emotive strategies and techniques associated with the treatment of mental and emotional disorders commonly encountered in mental health settings. **Prereq.:** COUN 6980 or COUN 7013A.

COUN 7038 Counseling with Couples 3 s.h.

Application of family systems theory to intervention and prevention strategies with couples.

COUN 7039 Administration and Supervision of Mental Health Services 2 s.h.

A comprehensive study of management, planning, function, personnel structuring, supervision, and counseling services in a mental health setting.

COUN 7040 Principles and Techniques in Counseling Supervision 3 s.h.

Theory and practice of counselor supervision. Includes practicum assignment in counselor education. For counseling majors only and by permission of Department of Counseling.

Prereq.: COUN 7010.

COUN 7041 Case Conceptualization, Treatment Planning, and Clinical Supervision 3 s.h.

The purpose of this course is to provide students with the advanced case conceptualization, treatment/planning intervention (24 hours) and theory/ practice of supervision (24 hours). Includes 12 contact hours of supervision of practicum students at the YSU Counseling Program Community Counseling Clinic.

Prereq. or Coreq.: COUN 7010.

COUN 7042 Administration and Organization in Higher Education 3 s.h. The purpose of this course is to expose graduate students to the complex study of administrative practices and organizational theory in the context of examining campus environments. By developing an informed knowledge base regarding the multiple perspectives of organizations and campus environments, students will be better prepared to lead change in student affairs settings.

COUN 7043 Counseling Techniques 3 s.h.

Didactic and clinical practice training in the use of specific counseling techniques. The course is designed to provide focused training in counseling techniques from four domains of human functioning: (1) cognitions; (2) emotions; (3) behaviors; and (4) physiology. Didactic training includes brief reviews of counseling processes and theoretical models that provide a foundation for each technique as well as demonstrations of each technique. Includes opportunities for learners to practice each technique in small groups and receive feedback on both the fidelity/accuracy and effectiveness of their use of each technique. This course is designed primarily as a skills-building experience to equip learners with theory-based counseling techniques for use in counseling practice.

Prereq.: COUN 6900, COUN 6962.

COUN 7044 Leadership and Administration in Student Affairs 3 s.h.

This course provides students with an opportunity to read, reflect, and integrate theories, concepts, and practices related to leadership and administration. Students will be challenged to reflect on their core values and principles. Students will see leadership through a new paradigm, and formulate their own philosophy of leadership. Students will be challenged to employ visionary leadership in the planning and implementation stage of change.

COUN 7046 Assessment in Student Affairs Practice 3 s.h.

The purpose of this course is to promote the understanding of assessment and program evaluation in enhancing practice. The course will focus on how to utilize assessment to improve practice and to demonstrate the effectiveness of programs, as well as to provide opportunities to effectively assess various dimensions of the college experience. By learning the usefulness and appropriateness of various assessment methodologies, the emerging practitioner will learn to provide evidence for effective practice.

COUN 7509 Family Systems Within an Educational Context 3 s.h. The focus of the didactic and experiential course will be on identifying patterns of children's symptoms, repositioning of the therapist within the educational system context and learning various therapeutic techniques to use with families of children with disabilities or other mental health issues.

Master of Science in Education-Educational Administration Program Coordinator

Dr. Jane Beese

4105 Beeghly College of Liberal Arts, Social Sciences, and Education 330-941-2236 jbeese@ysu.edu

Program Description

The Educational Administration program prepares reflective administrative practitioners who are capable of providing culturally responsive, vision-driven, managerial, and instructional leadership in public and nonpublic school settings (also see the Doctor of Education in Educational Leadership section.) Additional coursework is provided which leads to:

- Ohio administrative licensure as elementary principal for ages 3 through 12;
- middle school principal for ages 8 through 14;
- secondary principal for ages 10 through 21;
- administrative specialist in curriculum, instruction, and professional development; and
- · superintendent.

In addition, the department offers programs for Pennsylvania administrative certification as principal for grades K–12 and the letter of eligibility for superintendent.

Admission Requirements

In addition to the minimum College of Graduate Studies admission requirements, Education Administration applicants should submit the following:

- Evidence that the applicant holds or is eligible for a professional teaching certificate or license.
- · An undergraduate grade point average of 3.0 or above.
- For applicants with an undergraduate grade point average between 2.70 and 2.99, satisfactory scores on the Graduate Record Examination or on the Miller Analogies Test.
- The names and contact information (address, phone number, and email address) for three professional references.

Graduate Faculty

Jane Beese, Ed.D., Professor Organizational leadership; economics of education; program evaluation

Charles Jeffords, Ed.D., Assistant Professor Administrative practices; school and community relations; school finance

Karen H. Larwin, Ph.D., Professor Assessment; research design and methodology; statistics

A minimum of 30 semester hours is required for the degree. In addition to the following educational administration and foundations courses, students must successfully complete a comprehensive examination covering the educational administration courses listed under Special Notes.

Master's Degree Introduction to School Leadership and Educational Organizations

This program introduces students to the realities of school leadership, providing them a broader vision and deeper understanding of educational policy and organizations and the role of the school leader in promoting effective instruction and continuous school improvement. It begins to transform their perspectives from that of a classroom teacher to one of an administrator. Other courses develop leadership knowledge and skills specific to building level operations, focusing on the role of principal in relation to staff and community, school safety and the administration of discipline, support programs and services for students with disabilities, and how legal and fiscal considerations shape and influence administrative decision making and the exercise of leadership.

Students must complete a minimum of 30 hours satisfying the following distributional requirements:

COURSE	TITLE	S.H.
Leadership Course	es	12
EDAD 6915	Learning, Teaching, and Instructional Leadership	
EDAD 6933	Educational Leadership and Organizational Change	
EDAD 6936	Culturally Responsive Leadership	
EDAD 7020	Human Resource Leadership	
Specialty Adminis	trative Courses	18
EDAD 6947	School Building Operations and Management	
EDAD 6948	Data Driven School Improvement and Program Evaluation	
EDAD 7018	School Discipline and Student Support Services: Policies, Programs and Prevention Strategies	
EDAD 6949	Legal and Ethical Issues in Public Administration	
EDAD 6952	School Finance and Budget Planning Processes	
EDAD 6954	Community Engagement and Collaborative Partnerships	
Total Semester Hours		30

Special Notes

Before being granted the degree, candidates must successfully complete a comprehensive examination covering leadership and administrative specialty courses.

This program provides no license in administrative areas. Students who are enrolled in or have the M.S. in Education in Educational Administration degree have the opportunity to enroll in additional courses leading to the Ohio principal license.¹

All transfer students, including those seeking a master's degree and those who hold a master's degree, will be evaluated using the criteria listed previously. Students who have been evaluated through direct contact with the Ohio Department of Education should be aware that they must meet the criteria established by the Department of Teacher Education and Leadership Studies at YSU before the M.S. in Education in Educational Administration will be granted.

¹ Completion of the minimum number of semester hours indicated for each program and any other Ohio or Pennsylvania Department of Education requirements must be achieved before recommendation for any license. Those seeking initial administrative licensure in the State of Ohio must also obtain a passing score on the state-prescribed administrative licensure exam for the license they seek.

Post-master's Licensure Requirements

Candidates for an Ohio administrative license must be enrolled in or have completed the M.S. in Education degree in Educational Administration. Prior to enrolling in licensure coursework they must provide an updated professional resume and documentation from a licensed principal, superintendent, or other administrator where they work attesting to their skills, knowledge, professionalism, and leadership potential and agreeing to provide supervision in accordance with the clinical policies and procedures for YSU's principal program.

Principal License (OHIO) (6 semester hours)

Elementary Principal License Grades PK-6

Middle School License Grades 4-9

Secondary Principal License Grades 5-12

The licensure coursework consists of four 1-credit clinical courses, in addition to a 2-credit course in Special Education Law. The clinical experience is designed to afford candidates the opportunity to apply the content knowledge from their course work and practice the skills necessary for effective leadership. Across the four courses, candidates observe and then carry out a range of administrative responsibilities including analyzing student performance, carrying out clinical supervision of teaching staff, writing a staff improvement plan, designing a HQ staff development program, creating a master schedule, participating in teacher hiring processes, administering student discipline, conducting school safety drills, and coordinating special education meetings and functions, among others. In addition, candidates design and implement an Integrated School Improvement Project addressing a real need in their school setting. Candidates and faculty participate in an interactive on-line clinical learning community spanning diverse and geographically dispersed clinical sites.

COURSE	TITLE	S.H.
EDAD 7019	Special Education Law and Policy	2
EDAD 7022A and 7	7022B must equal 4 hours	4
EDAD 7022A	Clinical Experience: The Principalship-Elementary (E) Middle (M) Secondary (S)	
EDAD 7022B	Clinical Experience: The Principalship-Elementary (E) Middle (M) Secondary (S)	
Total Semester Hours		6

Candidates must hold or qualify for a valid teacher certificate/license at the same level as the administrative license being sought. They must also have two years of successful teaching under a professional teaching license at the same level as the administrative license being sought. Before being recommended for licensure, candidates must have a passing score on the state-prescribed administrative licensure exam for the principalship. Individuals qualifying for licensure at the Elementary or Secondary level are also issued licensure at the Middle School level.

Administrative Specialist License

Administrative Specialist License in Curriculum, Instruction, and Professional Development

Master's degree in educational administration, plus 18 hours of course work from the following list, which must include EDAD 7040 Clinical Practice for the Administrative Specialist:

COURSE	TITLE	S.H.
TCED 6936	Curriculum, Assessment, and Instruction to Improve Learning	3
SPED 6900	Issues, Trends & Ethical, Legal and Professional Guidelines in Special Education	3
EDAD 7018	School Discipline and Student Support Services: Policies, Programs and Prevention Strategies (Change title to School Discipline and Student Support Services)	3
EDAD 6948	Data Driven School Improvement and Program Evaluation	3
EDAD 7019	Special Education Law and Policy	2
EDAD 7040	Clinical Practice for the Administrative Specialist	3

Or a Master's degree in curriculum at YSU, plus coursework as follows:

COURSE	TITLE	S.H.
EDAD 6915	Learning, Teaching, and Instructional Leadership	3
EDAD 6947	School Building Operations and Management	3
EDAD 6949	Legal and Ethical Issues in Public Administration	3
EDAD 6952	School Finance and Budget Planning Processes	3
EDAD 6954	Community Engagement and Collaborative Partnerships	3
EDAD 7022		3
EDAD 7020	Human Resource Leadership	3
EDAD 7018	School Discipline and Student Support Services: Policies, Programs and Prevention Strategies	3
EDAD 6948	Data Driven School Improvement and Program Evaluation (Data-based Decision Making and Program Evaluation)	3
EDAD 7040	Clinical Practice for the Administrative Specialist	3
Total Semester Hours		30

Candidates must qualify for/hold a valid professional teacher certificate/ license and have two years of successful teaching under a professional teaching certificate/license. In addition, candidates must have completed the prescribed number of hours and have an official score report indicating a passing score on the state prescribed administrative licensure examination required for the license.

Superintendent License (OHIO)

Candidates must hold an administrative certificate or license issued upon the recommendation of YSU or the equivalent thereof as evaluated by the Department of Teacher Education and Leadership Studies at YSU, complete the following course sequence, and meet any other Ohio State Department of Education requirements.

The licensure coursework consists of three 1-credit clinical courses, in addition to four 3-credit courses. This model shifts the leadership focus from the micro (school site) to the macro (school systems) level and familiarizes prospective superintendents with systems knowledge and perspective on leadership in areas from educational governance to human resource administration to technology and facilities.

	S.H.
5 5 7	3
	tive Bargaining and Systems Issues in Human Irces Administration

Total Semester Ho		
EDAD 7050B	Clinical Experience: Superintendency	
EDAD 7050A	Clinical Experience: Superintendency	
EDAD 7050A and 7	7050B must equal 4 hours	4
EDAD 7035	The Superintendency and Evolving Ways of Looking at Leadership	3
EDAD 7026	Technology and Facilities for Learning Organizations	3
EDAD 7025	Educational Governance: Advanced Law and Policy Seminar	3

PRINCIPAL CERTIFICATE K-12 (Pennsylvania)

Candidates must hold a Master's degree from an accredited program. The professional education program provides evidence that School Principal certification candidates demonstrate knowledge of and competence in working in the elementary and secondary public school settings, including completion of the 36 semester hours listed below, many of which are included in the typical master's degree in educational administration. They must also provide an official score report indicating:

achieve a passing score on state licensure exam for principalship; and
satisfy any other Pennsylvania Department of Education Requirements, plus:

Completion of 36 s.h. below (to extent not already taken as part of a master's degree program):

COURSE	TITLE	S.H.
EDAD 6915	Learning, Teaching, and Instructional Leadership	3
EDAD 6936	Culturally Responsive Leadership	3
EDAD 6947	School Building Operations and Management	3
EDAD 6949	Legal and Ethical Issues in Public Administration	3
EDAD 6952	School Finance and Budget Planning Processes	3
EDAD 6954	Community Engagement and Collaborative Partnerships	3
Select one clinica being sought:	I experince course as appropriate to the licensure level	
EDAD 7018	School Discipline and Student Support Services: Policies, Programs and Prevention Strategies	3
EDAD 7019	Special Education Law and Policy	2
EDAD 7022		4

The professional education program provides evidence that each certification candidate demonstrates knowledge and competencies that foster professionalism and ethical practices in school/community settings including:

- 1. Professional organizations, professional literature, resources and advocacy groups.
- Integrity and ethical behavior, professional conduct as stated in Pennsylvania's Code of Professional Practice and Conduct for Educators; and local, state, and federal laws and regulations.
- Communicating effectively (orally and in writing) with students, colleagues, faculty, families, paraprofessionals, related service personnel, outside agencies and the community.
- 4. Recognizing the professional responsibilities of administrators' and teachers' roles as collaborators, team members, advocates, and service coordinators.

Certification for the Pennsylvania Superintendent's Letter of Eligibility

Candidates must:

- · hold a Master's degree from an accredited program and principal's license;
- have six years of professional service in schools, three of which shall have been in supervisory or administrative positions;
- have an official score report indicating a passing score on state licensure exam for Superintendent;
- all other State of Pennsylvania Department of Education requirements must be met;
- plus completion of the 15 semester hours listed below, many of which may already have been completed as part of the candidate's master's degree in educational administration and principalship certification programs.

COURSE	TITLE	S.H.
EDAD 7024	Collective Bargaining and Systems Issues in Human Resources Administration	3
EDAD 7025	Educational Governance: Advanced Law and Policy Seminar	3
EDAD 7026	Technology and Facilities for Learning Organizations	3
EDAD 7035	The Superintendency and Evolving Ways of Looking at Leadership	t 3
EDAD 7050	Clinical Experience: Superintendency	3
Total Semester Hours		

Maximum C Grade Policy

A student may count no more than 6 s.h. of coursework with a grade of C toward the minimum graduation hour requirements.

Learning Outcomes

- Mission, Vision, and Improvement: Program completers will be able to "collaboratively lead, design and implement a school mission, vision and process for continuous improvement that reflects a core set of values and priorities" (NELP, 2018, pg. 13).
- Ethics and Professional Norms: Program completers will be able to "promote the current and future success and well-being of each student and adult by applying ethical decisions and cultivate and enact professional norms" (NELP, 2018, pg. 15).
- 3. Equity, Inclusiveness, and Cultural Responsiveness: Program completers will be able to "develop and maintain a supportive, equitable, culturally responsive and inclusive school culture" (NELP, 2018, pg. 18).
- Learning and Instruction: Program completers will be able to "evaluate, develop, and implement coherent systems of curriculum, instruction, supports and assessment" (NELP, 2018, pg. 21).
- Community and External Leadership: Program completers will be able to "engage families, community, and school personnel in order to strengthen student learning, support school improvement and advocate for the needs of their school and community" (NELP, 2018, pg. 25).
- Operations and Management: Program completers will be able to "improve management, communication, technology, school-level governance, and operation systems, to develop and improve data-informed and equitable school resource plans, and to apply laws, policies and regulations" (NELP, 2018, pg. 28).
- Building Professional Capacity: Program completers will be able to "build the school's professional capacity, engage staff in the development of a collaborative professional culture, and improve systems of staff supervision, evaluation, support and professional learning" (NELP, 2018, pg. 31).
- 8. **Internship:** Program completers will be able to synthesize and apply the above outcomes through substantial, sustained, standards-based work in real school building settings.

National Educational Leadership Preparation (NELP) Program. (2018). National educational leadership preparation (NELP) program recognition standards—Building level. Retrieved from www.npbea.org (http://www.npbea.org)

Graduate Courses

EDAD 6901 Instructional Leadership Beyond the Classroom 3 s.h.

Teacher leaders will lead both from within their own classrooms and beyond, therefore it will be important to equip candidates with the knowledge and skills that will assist them in any leadership situation they may face. Candidates will be introduced to the theory and practice of teacher leadership in order to assist in building teacher commitment, teacher efficacy, teaching competence, and instructional practices. There will be an additional emphasis on developing teacher leaders, specifically in the areas of adult learning principles, reflective practice, and professional learning communities. Candidates will be introduced to the importance of self-directed teacher professional development, taking on leadership roles at school, district, state, and national levels, as well as learning how to lead in both formal and informal ways.

EDAD 6903 Building Capacity of Adult Learners 3 s.h.

Learning is an extended, intricate, and lifelong process. Adult learners have a unique way of learning, one that varies from learning done in primary grades. As such, teacher leaders will need to have strong command of adult learning principles to effectively collaborate with others and assist adults in their own professional development. A study of current theories and research in the areas of social cognition, human development, interpersonal relationships, group processes, and motivation will assist candidates in meeting the needs of the adults they will work with. This course will be particularly helpful to those who mentor, lead professional development sessions, serve on building or district leadership teams, and participate in professional learning communities.

EDAD 6905 Culturally Responsive Teaching and Learning 3 s.h.

Educational leaders must practice professional, ethical values of equity, integrity, honesty, fairness, and dignity. The purpose of this course is to build candidate knowledge and skills in the area of culturally responsive leadership. Candidates will develop the ability to promote collaboration with faculty, administration, families, and community members and partners. This course will help candidates lead in culturally competent ways in order to make necessary changes in curriculum, culture, and school policies and practices. Additionally, candidates will learn how to assist others in providing individual learning opportunities for students where diverse perspectives are welcomed in addressing challenges.

EDAD 6906 Data-Coaching and Decision Making 3 s.h.

The purpose of this course is to provide candidates with the knowledge and skills to understand and utilize data to identify school improvement needs and make informed decisions in making change. Specifically, the course will provide opportunity for candidates to learn the nature of multiple data sources to identify patterns, trends, and improvement needs, conduct descriptive analysis, monitor and correct progress, and assist in developing high quality assessments. Candidates will experience authentic data-driven decision making by accessing state, district, school, and a variety of other relevant data resources to conduct descriptive and inferential analysis of trends and needs.

EDAD 6915 Learning, Teaching, and Instructional Leadership 3 s.h. Leadership behaviors and expectations intended to build teacher commitment, increase teaching competence, and improve the learning climate of students. The importance of and role that adult development and learning play in teacher leadership regarding curriculum and instruction decisions are stressed.

Reference

EDAD 6933 Educational Leadership and Organizational Change 3 s.h.

This course reviews, examines, and critiques significant theories, research, and professional practice related to school leadership. This course reviews the main research, theories, and practices that have been proven to facilitate effective organizational leadership. Change theory and processes will be studied to acquire knowledge and skills that will aid the development, implementation, and evaluation of a continuous, responsive, sustainable, data-based school improvement process. This course examines the concept of educational change, the role of school leaders as agents of change, and alternative change models and strategies, including the importance in attaining outcomes intended when introducing new initiatives.

EDAD 6936 Culturally Responsive Leadership 3 s.h.

This course examines culturally responsive pedagogy (CRP), which is a philosophy to facilitate student engagement and academic success by incorporating student cultures, experiences, and identities into the curriculum so that students and teachers can become co-creators of classroom knowledge.

EDAD 6947 School Building Operations and Management 3 s.h.

Theories of leadership and schooling that provide future principals with guides for action and behavior will be presented. Theories that shape personal decision-making processes that build schools as learning communities will be presented.

EDAD 6948 Data Driven School Improvement and Program Evaluation 3 s.h. This course examines the integral impact data-informed decision management has on educational accountability and the efficacy of program initiatives that facilitate standards for improvement in the classroom, building, and district level. Comprehensive data retrieval, analysis, and interpretation are invaluable to promote equitable and culturally responsive leaders who foster not only school improvement, but also a climate where accountability for students reaches further than academic performance.

EDAD 6949 Legal and Ethical Issues in Public Administration 3 s.h.

Reviews the legal foundation of schools and educational policy through the review of cases, statues, and constitutional provisions affecting the operation of elementary and secondary schools in the United States and explores the relationship between legal, ethical, and political issues in public administration. Acquaints educators with professional norms and ethical as well as legal standards, and means of identifying, evaluating, and making legal and ethical decisions, and modeling such behavior communicating and cultivating legal and ethical behavior in others.

EDAD 6952 School Finance and Budget Planning Processes 3 s.h. This course focuses on an analysis of school funding on a state and local level. School budgeting, site-based management, and school business practices are major topics. An action research project is part of the course requirement.

EDAD 6954 Community Engagement and Collaborative Partnerships 3 s.h. Within this course, candidates will explore, study, examine, and practice skills, which illustrate the role strategic marketing can play in building community support for schools and their programs. Within this context, candidates enrolled in this course will develop leadership perspectives that support school community collaboration and partnerships.

EDAD 6975 Introduction to Administration Clinical Experience 3 s.h. Designed to expand candidate's knowledge of the nature, characteristics and demands associated with school administration and provide opportunity to develop skills and dispositions needed for administrative responsibilities. Includes focused field experiences embedded in various courses throughout the program. Requires candidates to perform a particular administrative function in school and community settings.

Prereq.: Completion of five of the following courses EDAD 6915, EDAD 6931, EDAD 6933, EDAD 6947, EDAD 6949, EDAD 6954, and EDAD 6955.

EDAD 6993 Special Topics in Educational Administration 1-4 s.h.

Prereq.: Admission to master's degree program in educational administration.

EDAD 7012 Technology Leadership and Organizational Change 3 s.h.

The role of a leader is to construct a vision for the appropriate use of technology and provide needed supports and resources for all stakeholders to meet it. The new pedagogy for digital natives must shift from the teacher teaching how to operate specific technology or applications to using technology to facilitate a deeper understanding and knowledge. The pedagogical shift to leveraging technology as a tool for learning facilitation, requires a leader who is willing to support his/her stakeholders throughout the change process. Effective technology initiatives are not device centric, but people centric, as they are the ones who create the environment for learning. This course explores how a culture of change will replace traditional technology use and pedagogy with technology integrated throughout the culture and aligned to standards and essential conditions as defined by the International Society for Technology in Education.

EDAD 7018 School Discipline and Student Support Services: Policies, Programs and Prevention Strategies 3 s.h.

Examines school discipline and youth problems that threaten student health, welfare, and safety and research-proven school programs for addressing such problems. Emphasizes the role of school leaders in developing and implementing comprehensive policies and student support programs.

EDAD 7019 Special Education Law and Policy 2 s.h.

Provides an introduction to schools as political systems and the values that shape educational politics and policymaking. Examines the concept of educational change, the role of school leaders including the importance of implementation in attaining outcomes intended when introducing new initiatives. Uses special education law as vehicle for exploring change in educational policy and practice. Reviews the rights of pre and elementary and secondary students with disabilities to a free and appropriate education through an examination of state and federal laws, regulations, guidance documents and judicial interpretations of the Individual with Disabilities Act and Section 504 of the Rehabilitation Act of 1973. Explores issues of eligibility and evaluation; IEP development and student placement in LRE settings; related, assistive technology, and transition services; student discipline and behavior management; means of conflict or dispute resolution including mediation and due process hearings; as well as remedies available to parents for non-compliance under IDEIA.

Prereq.: Admission to the Master's in Educational Administration Program.

EDAD 7020 Human Resource Leadership 3 s.h.

This course provides an in-depth examination of policies and practices designed to reconcile the interests of organizations (schools) and stakeholders (staff, faculty, and community). Topics include professional and staff development, equal employment, positions description, recruitment, selection, performance appraisal, removal, compensation, and emerging human resource issues.

EDAD 7022A Clinical Experience: The Principalship-Elementary (E) Middle (M) Secondary (S) 1-4 s.h.

Completed in a school covered by teaching certificate or license. Second administrative clinical experience designed to highlight tasks. May be repeated for credit to fulfill program requirements.

EDAD 7022B Clinical Experience: The Principalship-Elementary (E) Middle (M) Secondary (S) 1-4 s.h.

Completed in a school covered by teaching certificate or license. Second administrative clinical experience designed to highlight tasks. May be repeated for credit to fulfill program requirements.

EDAD 7024 Collective Bargaining and Systems Issues in Human Resources Administration 3 s.h.

Human resources issues from the central office perspective. Statutory, regulatory, and political contexts for public sector collective bargaining. Conceptual and experiential treatment of traditional and interest-based bargaining. Approaches to human resources policy development. Grievances and management of written agreements.

EDAD 7025 Educational Governance: Advanced Law and Policy Seminar 3 s.h.

Explores emergent legal developments affecting P-12 education systems and the role and limits of the law in promoting educational emergent reform. Reviews social science literature on governance issues and factors that affect the nature, degree, and rate of organizational compliance.

EDAD 7026 Technology and Facilities for Learning Organizations 3 s.h.

Due to increasing demands upon the educational facilities by the instructional use of technology and the need to prepare students for the world of work, facility management and integration of technology into the facility are examined.

EDAD 7035 The Superintendency and Evolving Ways of Looking at Leadership 3 s.h.

This course examines the role of superintendent in the administration of schools. Students will study leadership in complex social organizations so that they can apply current theory and research to their roles in complex, chaotic, educational environments.

EDAD 7040 Clinical Practice for the Administrative Specialist 3 s.h.

Candidates for administrative specialist licenses in areas of curriculum, instruction, and professional development or pupil services administration develop an individualized clinical plan and complete a set of tasks and an integrated project aligned with professional standards under the guidance of an appropriately licensed cooperating administrator.

EDAD 7050 Clinical Experience: Superintendency 1 s.h.

Candidates for the superintendency license are required to complete four tasks from the master syllabus at the district-wide level, supervised by a school superintendent. Major components are the complete analysis of the financial structure of the candidate's school district and a system-level integrated project.

EDAD 7050A Clinical Experience: Superintendency 1 s.h.

Candidates for the superintendency license are required to complete four tasks from the master syllabus at the district-wide level, supervised by a school superintendent. Major components are the complete analysis of the financial structure of the candidate's school district and a system-level integrated project.

Prereq.: Completion two years experience in a building-level administrative capacity or equivalent.

EDAD 7050B Clinical Experience: Superintendency 1 s.h.

Candidates for the superintendency license are required to complete four tasks from the master syllabus at the district-wide level, supervised by a school superintendent. Major components are the complete analysis of the financial structure of the candidate's school district and a system-level integrated project.

Prereq.: Completion of two years experience in a building-level administrative capacity or equivalent.

EDAD 7060A Clinical Experience: Health and Human Services 1 s.h.

The clinical practice for Health and Human Service Leaders is an intensive, 21-week, field-based experience that expands the candidate's awareness of the nature, characteristics and demands associated with senior leadership roles in HHS organizations. It provides an opportunity to apply administrative theories, concepts, and best practices under the mentorship of a veteran onsite administrator and a university supervisor. The experience, broken down into three 7-week terms, involves the completion of a series of administrative and leadership competencies spanning different areas of organizational operations aligned with the National Education Leadership Preparation (NELP) Standards To satisfy the Ed.D. Clinical requirement, HHS candidates must enroll in EDAD 7060 for three 7-week terms. EDAD 7060 is denoted with an A or B depending on whether it appears in the 1st seven weeks or the 2d seven-weeks of the Fall, Spring or Summer Semester.

Prereq.: EDAD 8122, EDAD 8125, EDAD 8130, EDAD 8135, EDAD 8142, EDAD 8140, EDAD 8155, EDAD 8102.

EDAD 7060B Clinical Experience: Health and Human Services 1 s.h.

The clinical practice for Health and Human Service Leaders is an intensive, 21-week, field-based experience that expands the candidate's awareness of the nature, characteristics and demands associated with senior leadership roles in HHS organizations. It provides an opportunity to apply administrative theories, concepts, and best practices under the mentorship of a veteran onsite administrator and a university supervisor. The experience, broken down into three 7-week terms, involves the completion of a series of administrative and leadership competencies spanning different areas of organizational operations aligned with the National Education Leadership Preparation (NELP) Standards. To satisfy the Ed.D. Clinical requirement, HHS candidates must enroll in EDAD 7060 for three 7-week terms. EDAD 7060 is denoted with an A or B depending on whether it appears in the 1st seven weeks or the 2d sevenweeks of the Fall, Spring or Summer Semester.

Prereq.: EDAD 8122, EDAD 8125, EDAD 8130, EDAD 8135, EDAD 8142, EDAD 8140, EDAD 8155, EDAD 8102.

EDAD 7070A Clinical Experience in Higher Education 1 s.h.

Higher Education Internship is an intensive, 120 hour supervised internship designed to expand students' professional skills, awareness, reflective abilities, and capacity for leadership. The internship is completed under the mentorship of an accomplished on-site administrator in conjunction with a university supervisor. The internship involves the completion of a Higher Education Change Project keyed to a series of competencies aligned with the Professional Competency Areas for Student Affairs Educators as adopted by both NASPA (Student Affairs Administrators in Higher Education) and ACPA (College Student Educators International). Candidates participate actively in a Virtual Clinical Learning Community and share their clinical experiences with other administrative candidates at geographically-dispersed and demographically-diverse institutions. Finally, they develop a Comprehensive Competency Report that they can elect to fashion into Administrative and leadership lessons learned.

EDAD 7070B Clinical Experience in Higher Education 1 s.h.

Higher Education Internship is an intensive, 120 hour, over three 7-week sessions, supervised internship designed to expand students' professional skills, awareness, reflective abilities, and capacity for leadership. The internship is completed under the mentorship of an accomplished on-site administrator in conjunction with a university supervisor. The internship involves the completion of a Higher Education Change Project keyed to a series of competencies aligned with the Professional Competency Areas for Student Affairs Educators as adopted by both NASPA (Student Affairs Administrators in Higher Education) and ACPA (College Student Educators International). Candidates participate actively in a Virtual Clinical Learning Community and share their clinical experiences with other administrative candidates at geographically-dispersed and demographically-diverse institutions. Finally, they develop a Comprehensive Competency Report that they can elect to fashion into Administrative Portfolios documenting her or his clinical activities and the administrative and leadership lessons learned.

EDAD 8105 Research Methods for the Practitioner 3 s.h.

Research Methods for the Practitioner is an essential course designed for educators, administrators, and research practitioners seeking to enhance their research competency. The course is focused on providing practitioners with knowledge, skills, and resources to apply research-based practices in educational contexts. This course will enable students to think critically about research processes, develop a better understanding of scholarly research literature, and enhance their research literacy. By taking this course, students will gain insights into how research is conducted, evaluated, and used to inform decision making within their field. The course emphasizes practical application and hands-on experience, enabling students to develop a research plan, conduct data collection, and analyze and interpret research findings. As such, this course is an essential resource for practitioners seeking to improve their research skills and contribute to evidence-based practices within their educational contexts.

EDAD 8111 Advanced Research Design and Statistics 3 s.h.

An in-depth treatment of the major correlational, experimental, and quasiexperimental research designs and associated statistical analyses, including the design and analysis of surveys and factor analytic techniques. Experience in data analysis using SPSS or other statistical packages. 3 s.h. Cross listed with FOUN 8111.

Prereq.: EDAD/FOUN 8104.

EDAD 8114 Applied Case Study Methodology 3 s.h.

A course designed to acquaint students with qualitative inquiry. Focuses on philosophical and historical roots of investigation in institutional and social settings, with an emphasis on gualitative research methodology, techniques of exploring data, guided practice, ethical and social issues.

EDAD 8115 Evidence, Research and Program Evaluation 3 s.h.

Evidence, Research, and Data in Program Evaluation is designed for practitioners seeking to enhance their understanding of Program Evaluation and Data Mining methods. Students will explore quantitative research design, sampling strategies, initial research category formation, and data coding methods. The course will also utilize statistical tools, such as regression analysis, to demonstrate how data can be collected to form statistically significant conclusions. Throughout the course, students will examine a variety of case studies from the field of education to provide practical applications for the topics covered. By the end of the course, students will be equipped with applied research methods that can be used when engaging with stakeholders or evaluating programs within their own organization.

EDAD 8122 Leadership in Education 3 s.h.

In this course students will critically analyze contemporary ways of thinking about leadership. As students examine their present paradigm of leadership, they will also analyze a reconfiguration of leadership that reflects developments in the new sciences and other fields. Prereq.: Admission to the doctoral program.

EDAD 8125 Educational Politics and Policymaking in the United States 3 s.h.

Reviews professional literature on politics and policy making at the local, state, and federal level, including the values, institutional actors, processes, and interest groups that shape educational policy. Explores means of identifying problems, analyzing policy alternatives, and measuring policy outcomes. Prereq.: Admission to the doctoral program.

EDAD 8126 Legal Issues in Higher Education 3 s.h.

This course explores legal issues and principles that guide the administration of higher education. Students will examine significant issues and trends, past and present, in higher education law to understand the legal environment in which colleges and universities operate. Topics will include academic freedom, student rights (including Title IX), and student conduct.

EDAD 8130 Learning Processes and the Instructional Leader 3 s.h.

A study of current theories and research in the areas of cognition and learning, development and motivation that underlay approaches to teaching in any context

EDAD 8131 Social Emotional Wellness for Wounded Students from a Leadership Perspective 3 s.h.

Selected topics for a focused study on problems, issues, or concerns that relate to educational leadership. To provide a wealth of strategies for educators who work with students who are beyond the point of at-risk and experienced trauma in their lives and are wounded. By examining key strategies necessary for schools will transform the lives of wounded students socially, emotionally, and academically. Recognizing the effective power of leadership and empathy in creating a sense of community and safety for wounded students, these strategies and resources will meet the needs of wounded children and empower educators to direct students on a path to academic and life success.

EDAD 8135 Building Organizational Culture and Community Partnerships 3 s.h.

Building Organizational Culture and Community Partnerships is designed in accordance with the National Educational Leadership Preparation (NELP) District Level Program Standards, Standard 5. Candidates in this educational leadership preparation course will learn to apply new knowledge and skills to engage families, communities, and related business partnerships to meet student and community cultural and environmental needs. An examination of the school and community culture will contribute to the essential objectives of the course.

EDAD 8140 Seminar in Administrative Theory 3 s.h.

Extension of the administrator's abilities to analyze professional problems, develop leadership strategies, and exercise sound decision making. Nontraditional (nonfunctionalist) theories are stressed, with emphasis on deconstructing and purposefully framing educational issues. Case studies strengthen the application of the theories. Prereq.: Admission to the doctoral program.

EDAD 8141 History of Higher Education 3 s.h.

A course that examines the historical development of post-secondary education in the United States. The purpose of the course is to identify how higher educational institutions have been utilized and situated throughout American history with special attention given to locating the historical context and source of the promise and problems associated with contemporary American higher education.

EDAD 8142 Educational Problem Solving and Ethical Decision Making 3 s.h.

This course will teach students how to make competent leadership decisions by applying and enforcing ethical standards with followers. Ethics is at the heart of leadership. Leaders must make every effort to make ethical decisions and foster ethical behavior among followers. In this course students will explore the ethical demands of leadership. We draw from many fields of research to help students make ethical decisions, lead with integrity, and create an ethical culture. This course is designed to increase students' ethical competence and leadership abilities.

EDAD 8143 Higher Education Finance & Policy 3 s.h.

This course examines the roles of the state and federal government, governing boards, local administrations, and other parties in shaping public policy in higher education. The course will also provide an overview of financial resource management at the institutional level, including the following: budgeting and planning for needs; cost and benefit analysis; public and private grants and gifts; and budget control strategies.

EDAD 8144 Assessment and Evaluation in Higher Education 3 s.h.

This course provides an overview of assessment practices to ensure accountability and inform continuous improvement. Emphasis will be placed on curriculum-based assessment of learning outcomes, measures to improve teaching and learning, and the use of formative and summative evaluation strategies in educational decision-making.

EDAD 8147 Diversity & Equity in Higher Education 3 s.h.

This course is designed to engage students with a critical perspective regarding issues of diversity and equity across higher education. This course will cover the development and acceptance of critical theory in higher education as it applies to race/ethnicity, class, gender, sexuality as well as other expressions of diversity.

EDAD 8155 Seminar in Current Educational Issues 3 s.h.

Informing educational leaders about contextual issues of schools is necessary in order to understand and recognize that school reform, both at the time of its proposal and during the developmental stages of its implementation, is intended to ameliorate educational problems. Prereq.: Admission to the doctoral program.

EDAD 8180 Special Topics in Educational Leadership 1-3 s.h.

Selected topics for a focused study on problems, issues, or concerns that relate to educational leadership.

Prereq.: Admission to the doctoral program.

EDAD 8180A Special Topics: Research Methods for the Practitioner 1-3 s.h.

Selected topics for a focused study on problems, issues, or concerns that relate to educational leadership. **Prereq.:** Admission to the doctoral program.

Prereq.: Admission to the doctoral program.

EDAD 8180B ST Appld Case Stu Methodology 1-3 s.h.

Selected topics for a focused study on problems, issues, or concerns that relate to educational leadership. **Prereq.:** Admission to the doctoral program.

EDAD 8180C ST Prog Eval and Data Mining 1-3 s.h.

Selected topics for a focused study on problems, issues, or concerns that relate to educational leadership.

Prereq.: Admission to the doctoral program.

EDAD 8190 Dissertation Study 1-9 s.h.

Covers the design, proposal, conduct, reporting, and defense of scholarly research that addresses a meaningful topic derived from and contributing significantly to the literature of the field.

Prereq.: Completion of doctoral comprehensive examination.

EDAD 8191 Seminar in Educational Research--Dissertation: Review of Literature 2 s.h.

Students will build knowledge and skills in conducting a literature review to complete Chapter 2 of their dissertation. Writing will be broken down into manageable milestones, following the guidelines set forth by the YSU Educational Leadership Dissertation Guidelines and template. **Prereq.:** FOUN 8104, FOUN 8111, and FOUN 8112 or EDAD 8105, EDAD 8114, and EDAD 8115.

EDAD 8192 Seminar in Educational Research: Introduction & Proposal Defense 2 s.h.

This course is the for Doctoral Candidates who are in the process of developing and completing Chapter 1 of their dissertation. Doctoral Candidates will develop Chapter 1 which includes the background to the problem, problem statement, purpose statement, theoretical frame, limitation, operational definitions, methods, etc. relevant to the proposed research study. Finally, they will develop a presentation and defend their proposal to their committee.

Prereq.: Admission to EdD program in Educational Leadership. Prereq. or Coreq.: EDAD 8191 and EDAD 8193.

EDAD 8193 Seminar in Educational Research--Dissertation: Methodology 2 s.h.

Students will build knowledge and skills in developing Chapter 3 of their dissertation. Writing of Chapter 3 will be broken down into manageable milestones, following the guidelines set forth in the YSU Educational Leadership Dissertation Guidelines and template.

Prereq.: Admission to EdD program in Educational Leadership. Prereq. or Coreq.: EDAD 8191.

EDAD 8194 Seminar in Educational Research – Dissertation: Data Collection & Analysis 2 s.h.

The purpose of this course is to build candidate knowledge and skills in developing Chapter 4 of their dissertation. Students will collect the data for their dissertation and complete the analysis of that data and write up their findings in Chapter 4 of their dissertation, broken down into manageable milestones, following the guidelines set forth in the YSU Educational Leadership Dissertation Guidelines and template. **Prereg.**: EDAD 8191, EDAD 8192, and EDAD 8193.

EDAD 8195 Seminar in Educational Research: Dissertation: Results & Discussion 2 s.h.

The purpose of this course is to build candidate knowledge and skills in developing Chapter 5 of their dissertation. Students will discuss the findings and their implications in Chapter 5 of their dissertation, broken down into manageable milestones, following the guidelines set forth in the YSU Educational Leadership Dissertation Guidelines and template. Students will then defend their dissertation to their committee for approval. **Prereq.:** EDAD 8191, EDAD 8192, EDAD 8193, and EDAD 8194. **EDAD 8196** Seminar in Educational Research: Dissertation Defense 2 s.h. This course is the for Doctoral Candidates who are near the end of the

dissertation process. Doctoral Candidates will prepare their dissertation defense and successfully defend their dissertation proposal to their committee. Finally, they will prepare the final version of their dissertation and submit to the Graduate school.

Prereq.: EDAD 8191, EDAD 8192, EDAD 8193, and EDAD 8194.

EDAD 8949 Legal and Ethical Issues in Public Administration 3 s.h. Defines law and professional ethics and discusses the role of each in public decision making. Explores the status and application of the law in various areas of school operations through the reading of cases, statutes, and constitutional provisions.D. program in Educational Leadership. Ed.D. students who have not taken EDAD 6949 are required to complete EDAD 8949 and include a supplemental, substantive course assignment involving original research using primary source materials in education law and policy. **Prereq.:** Admission to the Ed.

Master of Science in Education – Special Education

Introduction

The master's degree program in special education provides advanced cognitive and educational skills for those who are presently working or expect to work as clinical/developmental personnel serving individuals with exceptionalities or as supervisors of special education programs. This degree program prepares candidates for work as an intervention specialist. Candidates will be introduced to advanced and in-depth teaching strategies which will provide understanding and provide the ability to implement tools as an intervention specialist working with learners with significant disabilities and exceptionalities.

Welcome

Our program is designed to prepare graduates with the knowledge, skills, and dispositions to best serve in schools and agencies in the area. Our accredited Special Education program seeks to meet the educational and service needs of Northeast Ohio and Western Pennsylvania. Our program is exemplified by the quality and diversity of classroom instruction, field experiences, program options, student, faculty, and graduates in the community. We have a long history of producing graduates who have served the area as Special Education teachers, Intervention Specialists, and Special Education Professionals. We have a strong connection with our alumni, program supervisors, schools and agencies, and others who support students with exceptional learning needs in the Youngstown area.

Undergraduate and graduate candidates will find a unique educational experience that prepares them for employment and/or advanced study in Special Education. For more information, review our website and contact Special Education faculty with any questions.

For more information contact the Department Office at 330-941-3251 or visit the Department of Teacher Education and Leadership Studies (http:// catalog.ysu.edu/undergraduate/colleges-programs/college-education/ department-teacher-education/).

Program Coordinator

For specific questions about the Master of Science in Education - Special Education program, please contact the program coordinator.

Amy H. Camardese Beeghly College of Liberal Arts, Social Sciences and Education

Department of Teacher Education and Leadership Studies ahcamardese@ysu.edu

Mission

The Special Education Program supports the mission of both Youngstown State University and the Beeghly College of Liberal Arts, Social Sciences and Education through our work to:

- Prepare outstanding potential special education teachers by providing a rigorous educational program that is contemporary in its approaches, up to the minute in its content base knowledge, based upon didactic learning and practical experience and requiring demonstrated competency prior to graduation;
- Foster and require community and school based practicum experiences that involve the candidate developing cultural awareness and the acceptance of the diversity;
- Encourage candidates to expand their learning experiences though volunteerism by identifying campus and community opportunities for such practices;
- Connect candidates with community leaders and current practitioners in the field via guest lecturers and campus and community based presentations as a means of enhancing candidates' learning and advancing their awareness of the cultural and economic life of the community;
- Extend the University's efforts in advancing the intellectual and economic life of the state and region by providing advanced education and degrees to enable practitioners in the field to expand their knowledge base, meet the ever changing federal and state requirements to maintain licensure or certification in their field, and improve the economic status of those practitioners through acquisition of advanced degrees.

Accreditation

The Master of Science - Special Education graduate degree program is accredited by the National Council Association of Teacher Education (NCATE). To contact our current accreditation body, please go to: www.caepnet.org.

Both the Intervention Specialist Mild/Moderate Disabilities and the Autism & Related Disabilities Special Education Graduate Programs have received full recognition from the Council for Exceptional Children (CEC) https://www.cec.sped.org.

Graduate Faculty

Marcia Matanin, Ph.D., Professor

Assessment of student learning; program assessment; clinical partnerships

Graduate Courses

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 improves outcomes for learners with exceptionalities and their families as well as design and implement professional learning activities to increase their own practices.

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 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 6916 IEP Planning and Accommodations for Learners with Exceptional Needs 3 s.h.

This course is designed to provide the candidate with an exploratory study of the IEP process Candidates will understand how to write an IEP as well as collaborate with families and fellow staff members regarding learners with exceptionalities on this process.

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 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.

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 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 standardsbased 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.

Intervention Specialist Mild/ Moderate Disabilities

Introduction

The master's degree program in special education, Intervention Specialist Mild Moderate provides advanced knowledge and skills for those who presently work or expect to work as clinical/developmental personnel serving individuals with exceptionalities, as supervisors of special education programs, or as intervention specialist classroom teachers. This degree program may lead to licensure in Ohio or other states. (*Students are responsible for checking the requirements in their state if pursuing licensure.*) Ohio teachers who hold a teaching license may qualify to earn this license with the passage of state required exams, and possibly additional coursework.

The program is delivered in a fully online format (https://online.ysu.edu/ degrees/education/msed/sped-mild-moderate-disabilities/).

Welcome

Our program is designed to prepare graduates with the knowledge, skills, and dispositions to best serve in schools and agencies in the area. Our accredited Special Education program seeks to meet the educational and service needs of Northeast Ohio and Western Pennsylvania. Our program is exemplified by the quality and diversity of classroom instruction, field experiences, program options, student, faculty, and graduates in the community. We have a long

history of producing graduates who have served the area as Special Education teachers, Intervention Specialists, and Special Education Professionals. We have a strong connection with our alumni, program supervisors, schools and agencies, and others who support students with exceptional learning needs in the Youngstown area.

Undergraduate and graduate candidates will find a unique educational experience that prepares them for employment and/or advanced study in Special Education. For more information, review our website and contact Special Education faculty with any questions.

For more information contact the Department Office at 330-941-3251 or visit the Department of Teacher Education and Leadership Studies (http:// catalog.ysu.edu/undergraduate/colleges-programs/college-education/ department-teacher-education/).

Program Director

For specific questions about the Master of Science in Education - Special Education program, please contact the program director.

Amy H. Camardese Beeghly College of Liberal Arts, Social Sciences and Education Department of Teacher Education and Leadership Studies ahcamardese@ysu.edu *Mission*

The Special Education Program supports the mission of both Youngstown State University and the Beeghly College of Liberal Arts, Social Sciences and Education through our work to:

- Prepare outstanding potential special education teachers by providing a rigorous educational program that is contemporary in its approaches, up to the minute in its content base knowledge, based upon didactic learning and practical experience and requiring demonstrated competency prior to graduation;
- Foster and require community and school based practicum experiences that involve the candidate developing cultural awareness and the acceptance of the diversity;
- Encourage candidates to expand their learning experiences though volunteerism by identifying campus and community opportunities for such practices;
- Connect candidates with community leaders and current practitioners in the field via guest lecturers and campus and community based presentations as a means of enhancing candidates' learning and advancing their awareness of the cultural and economic life of the community;
- Extend the University's efforts in advancing the intellectual and economic life of the state and region by providing advanced education and degrees to enable practitioners in the field to expand their knowledge base, meet the ever changing federal and state requirements to maintain licensure or certification in their field, and improve the economic status of those practitioners through acquisition of advanced degrees.

Accreditation

The Master of Science - Special Education graduate degree program is accredited by the National Council Association of Teacher Education (NCATE). To contact our current accreditation body, please go to: www.caepnet.org.

Intervention Specialist Mild/Moderate Disabilities

Candidates for the Intervention Specialist Mild to Moderate Licensure option must meet all requirements for admission to the Graduate College as outlined in the YSU Graduate Catalog.

Candidates with bachelor degrees outside the college of education will be required to complete additional coursework for licensure. Candidates seeking initial licensure are required to successfully complete the Ohio Reading Requirement, PSYC 3709 and student teaching with edTPA for licensure.

For all candidates seeking a new area of licensure, 12 S.H. in reading, which includes a course in phonics, and passage of the appropriate licensure examination, are required by the Ohio Department of Education. Individuals holding teacher certification must fulfill the Ohio Reading requirement (12 S.H.). Completion of the OAE APK exam, Special Education content and the Foundations of Reading test are required by the Ohio Department of Education.

Candidates are given six (6) years in which to complete a master's degree from the day of acceptance into the Graduate Program. All candidates are required to purchase a Taskstream account to complete the critical tasks for each course, which is essential for the Council for the Accreditation of Educator Preparation (CAEP). Successful completion of the comprehensive examination is required. Candidates will be required to pass the appropriate licensure exam.

COURSE	TITLE	S.H.
Common Core		
TCED 6932	Action Research in Urban and Rural Education	3
SPED 6900	Issues, Trends & Ethical, Legal and Professional Guidelines in Special Education	3
SPED 6906	Understanding and Addressing the Characteristics and Behaviors of Learners with Exceptional Needs	3
SPED 6914	Positive Behavior Supports/Intervention Strategies to Support Social-Emotional Needs of All Learners	3
SPED 6916	IEP Planning and Accommodations for Learners with Exceptional Needs	3
SPED 6917	Effective Instruction for Learners with Exceptional Needs	3
SPED 6928	Transition to Adult Life	3
SPED 6929	Assessment of Exceptional Learners	3
SPED 6931	Field-based Practicum with Exceptional Learners in Grades K-6	3
SPED 6932	Field-based Practicum on Inclusive Practices with Exceptional Learners in Grades 7-12	3
Total Semester Hours		

Total Semester Hours

Maximum C Grade Policy

A student may count no more than 6 s.h. of coursework with a grade of C toward the minimum graduation hour requirements.

Learning Outcomes

Candidates develop a deep understanding of the critical concepts and principles of their field of preparation and, by completion, are able to use professional specialty practices flexibly to advance the learning of all P-12 students toward attainment of college- and career- readiness.

Candidates demonstrate their proficiencies to understand and apply knowledge and skills appropriate to their professional field of specialization so that learning and development opportunities for all P-12 are enhanced, through: Candidates use research and understanding of qualitative, quantitative and/ or mixed methods research methodologies to analyze data to impact student learning in the classroom.

Candidates participate in collaborative activities with others such as peers, colleagues, teachers, administrators, community organizations, and parents;

Candidates use/support appropriate applications of technology for their field of specialization.

Candidates apply professional ethics, standards, dispositions, laws, and policies.

Candidates learn and apply specialized content and discipline knowledge contained in approved state and/or national discipline-specific standards

Admission Requirements

In addition to the minimum College of Graduate Studies admission requirements, all master's in special education applicants must have the following:

- Cumulative grade-point average in undergraduate work of at least a 3.0 on a 4.0 scale.
- Students with a GPA of 2.5-2.99 must present a satisfactory score on the general test of the Graduate Record Exam (GRE), with scores of 150 verb., 148 quant., 4.0 writing.
- · 3 references that include: name, email and phone number
- · Official transcripts of all undergraduate or graduate work completed;

Candidates without a teaching certificate or license may be admitted on an individual basis to special education graduate programs. However, additional coursework may be required for licensure. Candidates with bachelor's degrees outside the College of Education will be required to complete additional coursework for licensure. For all candidates seeking a new area of licensure, the Ohio Reading Requirement including 12 s.h. in reading is required (TERG OAE exams are required by the Ohio Department of Education (ODE).

Individuals without a teaching certificate will also need to complete the Ohio Reading Requirement (TERG 3701, TERG 3702, TERG 3703, TERG 2610), OAE APK exam (Special Education content) and Foundations of Reading tests, PSYC 3709, SPED 4849 Supervised Student Teaching, and SPED 4869 Student Teaching Seminar, and passage of the appropriate licensure exam as required by ODE.

Autism and Related Disabilities Introduction

The master's degree program in special education, Special Education Autism & Related Disabilities (moderate/intensive disabilities) program provides advanced knowledge and skills for those who presently work or expect to work as clinical/developmental personnel serving individuals with exceptionalities, as supervisors of special education programs, or as intervention specialist classroom teachers. This degree program may lead to licensure in Ohio or other states. (*Students are responsible for checking the requirements in their state if pursuing licensure.*) Ohio teachers who hold a teaching license may qualify to earn this license with the passage of state required exams, and possibly additional coursework.

The program is delivered in a fully online format (https://online.ysu.edu/ degrees/education/msed/sped-autism/).

Welcome

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the quality and diversity of classroom instruction, field experiences, program options, student, faculty, and graduates in the community. We have a long history of producing graduates who have served the area as Special Education teachers, Intervention Specialists, and Special Education Professionals. We have a strong connection with our alumni, program supervisors, schools and agencies, and others who support students with exceptional learning needs in the Youngstown area.

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Program Director

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Amy H Camardese Beeghly College of Liberal Arts, Social Sciences and Education Department of Teacher Education and Leadership Studies ahcamardese@ysu.edu *Mission*

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- Connect candidates with community leaders and current practitioners in the field via guest lecturers and campus and community based presentations as a means of enhancing candidates' learning and advancing their awareness of the cultural and economic life of the community;
- Extend the University's efforts in advancing the intellectual and economic life of the state and region by providing advanced education and degrees to enable practitioners in the field to expand their knowledge base, meet the ever changing federal and state requirements to maintain licensure or certification in their field, and improve the economic status of those practitioners through acquisition of advanced degrees.

Accreditation

The Master of Science - Special Education graduate degree program is accredited by the National Council Association of Teacher Education (NCATE). To contact our current accreditation body, please go to: www.caepnet.org.

Autism and Related Disabilities

The Moderate/Intense Autism and Related Disabilities Option prepares candidates to teach students with autism and related disabilities as well as to develop advanced systematic instruction in life skills areas including learning and leadership skills appropriate to the area of specialization.

Candidates with bachelor degrees outside the college of education will be required to complete additional coursework for licensure. Candidates seeking initial licensure are required to successfully complete the Ohio Reading Requirement, PSYC 3709, student teaching and the edTPA for licensure.

For all candidates seeking a new area of licensure, 12 S.H. in reading, which includes a course in phonics, and passage of the appropriate licensure examination are required by the Ohio Department of Education. Individuals holding teacher certification must fulfill the Ohio Reading requirement (12 S.H.).

Candidates are given six (6) years in which to complete a master's degree from the day of acceptance into the Graduate Program. All candidates are required to purchase a Taskstream account to complete the critical tasks for each course, which is essential for the Council for the Accreditation of Educator Preparation (CAEP). Successful completion of the comprehensive examination is required. Candidates will be required to pass the appropriate licensure exams.

A candidate for the program must meet all requirements for admission to the Graduate College as outlined in the YSU Graduate Catalog. Candidates are responsible for adhering to all special education policies.

COURSE	TITLE	S.H.
SPED 6900	Issues, Trends & Ethical, Legal and Professional Guidelines in Special Education	3
SPED 6914	Positive Behavior Supports/Intervention Strategies to Support Social-Emotional Needs of All Learners	3
SPED 6928	Transition to Adult Life	3
SPED 6906	Understanding and Addressing the Characteristics and Behaviors of Learners with Exceptional Needs	3
SPED 6916	IEP Planning and Accommodations for Learners with Exceptional Needs	3
SPED 6917	Effective Instruction for Learners with Exceptional Needs	3
SPED 6929	Assessment of Exceptional Learners	3
TCED 6932	Action Research in Urban and Rural Education	3
SPED 6933	Field-based Practicum with Moderate/Intensive Exceptional Learners in Grades K-6	3
SPED 6934	Field-based Practicum with Moderate/Intensive Exceptional Learners in Grades 7-12	3

Total Semester Hours

Maximum C Grade Policy

A student may count no more than 6 s.h. of coursework with a grade of C toward the minimum graduation hour requirements.

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Learning Outcomes

 Candidates develop a deep understanding of the critical concepts and principles of their field of preparation and, by completion, are able to use professional specialty practices flexibly to advance the learning of all P-12 students toward attainment of college- and career- readiness.

- Candidates demonstrate their proficiencies to understand and apply knowledge and skills appropriate to their professional field of specialization so that learning and development opportunities for all P-12 are enhanced, through:
- Candidates use research and understanding of qualitative, quantitative and/or mixed methods research methodologies to analyze data to impact student learning in the classroom.
- Candidates participate in collaborative activities with others such as peers, colleagues, teachers, administrators, community organizations, and parents;
- Candidates use/support appropriate applications of technology for their field of specialization.
- Candidates apply professional ethics, standards, dispositions, laws, and policies.
- Candidates learn and apply specialized content and discipline knowledge contained in approved state and/or national discipline-specific standards.

Admission Requirements

In addition to the minimum College of Graduate Studies admission requirements, all master's in special education applicants must have the following:

- Cumulative grade-point average in undergraduate work of at least a 3.0 on a 4.0 scale.
- Students with a GPA of 2.5-2.99 must present a satisfactory score on the general test of the Graduate Record Exam (GRE), with scores of 150 verb., 148 quant., 4.0 writing.
- · 3 references that include: name, email and phone number
- · Official transcripts of all undergraduate or graduate work completed;

Candidates without a teaching certificate or license may be admitted on an individual basis to special education graduate programs. However, additional coursework may be required for licensure. Candidates with bachelor's degrees outside the College of Education will be required to complete additional coursework for licensure. For all candidates seeking a new area of licensure, the Ohio Reading Requirement including 12 s.h. in reading is required (TERG 3701, TERG 3702, TERG 3703, TERG 2610), and passage of the appropriate OAE exams are required by the Ohio Department of Education (ODE).

Individuals without a teaching certificate will also need to complete the Ohio Reading Requirement (TERG 3701, TERG 3702, TERG 3703, TERG 2610), OAE APK exam (Special Education content) and Foundations of Reading tests, PSYC 3709, SPED 4849 Supervised Student Teaching, and SPED 4869 Student Teaching Seminar, and passage of the appropriate licensure exam as required by ODE.

Master of Science in Education-Teacher Education

Dr. Lauren Cummins, Graduate Program Coordinator 2309 Beeghly College of Education (330) 941-7237 Icummins@ysu.edu

Introduction

The Master of Science in Education in Curriculum and Instruction provides advanced professional preparation for teachers. The Department of Teacher Education and Leadership Studies offers the Curriculum and Instruction master's program with the following specialization areas leading toward the Master of Science in Education degree.

Curriculum and Instruction specialization areas:

- Literacy
- Digital Teaching and Learning
- Teacher Leader
- other content area offered at YSU (contact the Department of Teacher Education for additional information). This option may lead to College Credit Plus eligibility

The Master of Science in Education in Curriculum and Instruction focuses on the development of professional practitioners committed to quality teaching. These professionals are committed to reflecting on, and applying knowledge, skills, and dispositions so that all students can learn. Central to the development of such professionals is the refinement of competencies in the areas of scholarship, teaching, leadership, communication, and interpersonal relations. Professional practitioners are committed to the belief that all children can learn.

For more information please contact the Teacher Education and Leadership Studies Office at (330)-941-3251.

Mission

The Department of Teacher Education and Leadership Studies' mission is to empower teachers for professional practice. The mission commits the faculty to a theme of critical reflective practice where candidates are engaged in activities that build on their knowledge, skills, and dispositions related to effective teaching. Faculty members are committed to educating practicing professionals in the areas of: scholarship, teaching, leadership, management, communication, and interpersonal relations.

Accreditation

The Beeghly College of Education Graduate Degree Programs were accredited by the National Council for Accreditation of Teacher Education (NCATE). http://www.ncate.org/.

Graduate Faculty

M. Kathleen L. Cripe, Ph.D., Professor, Chair STEM education; co-teaching

Lauren Cummins, Ed.D., Professor

Literacy development; mentorship; developmentally appropriate practice; learning communities; professional dispositions; digital storytelling; distance education

Marcia Matanin, Ph.D., Professor

Assessment of student learning; program assessment; clinical partnerships

Crystal L. Ratican, Ph.D., Associate Professor

Early childhood education; early childhood intervention specialists, literacy; teacher education

Graduate Courses

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 instruction and assessment 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.

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.

TCED 5991 Seminar in Teacher Education 1-5 s.h.

Various topics of current value in teacher education as selected by faculty. Grading is S/U.

Prereq.: Admission to College of Graduate Studies.

TCED 6905 Introduction to Digital Teaching and Learning 3 s.h.

Digital teaching and learning is much more than knowing some great apps for the smart board or iPad. It is understanding a new paradigm that promotes a new pedagogy. It takes educators beyond the formal traditional classroom of lecture and paper/pencil into an interactive, student-centered environment. This course will introduce students to the paradigm of digital teaching and learning and provide the framework and foundation for change within districts and classrooms to meet 21st century learning.

TCED 6906 Designing Curriculum for the 21st Century Learner 3 s.h.

What does curriculum in the 21st century look like? How does the thinking paradigm differ from the traditional curriculum model? This course will build on the Introduction to Digital Teaching and Learning by introducing students to models of digital teaching that transform curriculum into the 21st century digital learning. Students will explore the process of unlearning traditional teaching methods and explore the shift to personalized, entrepreneur learning. **Prereq.:** TCED 6905.

TCED 6907 Literacy for Digital Teaching and Learning 3 s.h.

Technology takes us out of a traditional form of literacy. Today, students are bombarded with tons of information and resources that effectively builds knowledge and skill for endless topics through the Internet. This course will explore the topic of digital literacy and support a knowledge-base that helps students in k-12 classrooms develop an ability to use digital technology to find information and critically evaluate that information's authority and relevance.

TCED 6908 Digital Learning Environments 3 s.h.

This course will provide students with learning experiences that explore what a classroom for digital learning looks and feels like. Students will be able to understand and be able to develop a variety of digital learning environments including; flipped class-times, blended learning environments, and online, distance education.

TCED 6910 Leadership for the 21st-Century 3 s.h.

This course will provide students with the knowledge and skills to provide leadership, developing the skills needed to become agents of change. The student will learn to lead and create classrooms, schools, and community organization where innovation, creativity, and technology is used to support learning environments that are engaging, supportive, and transformational.

TCED 6911 Coding for Educators 3 s.h.

Participants in this course will learn computational thinking, introductory computer programming, and technology integration for content courses. Participants will design three apps from start to finish, and leave the course with an instructional segment they can then implement into their curriculum.

TCED 6912 Gaming for Educators 3 s.h.

Participants in this course will develop instructional practices that rely on video games, and gaming techniques. Video games will be evaluated for inquiry skills, narrative potential, and content delivery. Video games are uniquely positioned to support student learning, as they serve multiple purposes and can be very engaging.

TCED 6932 Action Research in Urban and Rural Education 3 s.h.

This course focuses on action research as it applies to urban and rural education. Topics include reflecting to identify a problem, reviewing literature, planning and implementing interventions, data collection and analysis strategies, and sharing outcomes with others. Course may be offered onsite, online, or as a combination of both. Field experience in an appropriate educational setting is required.

Prereq.: Admission to School of Graduate Studies and Research.

TCED 6933 Brain Based Teaching and Learning 3 s.h.

This course is a critical appraisal of learning and teaching. Each learner constructs his/her brain as learning occurs. Teachers reconsider their practices in light of the science of learning research provided by education, neuroscience and socio-psychology. Course may be offered onsite, online, or as a combination of both.

Prereq .: Admission to School of Graduate Studies and Research.

TCED 6936 Curriculum, Assessment, and Instruction to Improve Learning 3 s.h.

Focus on the instructional design process from a practical perspective. Emphasis on planning the curriculum to include content analysis, learning objectives, instructional strategies, and measurement of student achievement.

TCED 6940 Foundations of STEM Education Theory to Practice 3 s.h.

Introduction to STEM education. Study of the history, foundation, and underlying principles of STEM education. Additional topics include: an inclusive mission engaging diversity in STEM education, STEM careers, and STEM as a part of the P-12 curriculum.

TCED 6941 Engineering and Technology Inquiry 3 s.h.

Introduction to principles of engineering and technology. Inquiry-based instruction using projects to solve engineering related problems with focus on implementation in the P-12 classroom. **Prereq.:** TCED 6940.

TCED 6942 Environmental Inquiry 3 s.h.

The topics will include energy and material balances, ecosystems, sustainability, water quality regulations and standards, stream hydraulics, introduction to water supply and treatment and wastewater treatment and techniques of solid waste and hazardous waste management. **Prereq.:** TCED 6940.

TCED 6943 STEM Integration in the P-12 Classroom 3 s.h.

Study of integration of STEM into the P-12 classroom through an innovative, integrated curriculum with multiple opportunities for P-12 students to engage in authentic, inquiry-based learning and design thinking.

TCED 6944 A Global Perspective 3 s.h.

Understanding of skills needed to compete in the global economy, and how STEM contributes to this. Focus on 21st century skills, persistence, inquiry, communication, creativity, and collaboration. P-12 STEM project development.

TCED 6945 STEM Leadership 3 s.h.

Focus on implementation of a STEM program to prepare students with STEM skills for college and career success. Physical environment, necessary resources, administrative and community buy-in and support. Grant writing for STEM education.

TCED 6946 Supervision of Instruction 3 s.h.

A course dealing with the supervision of classroom teachers and other personnel for those aspiring to be principals or supervisors. Classroom observation systems, professional development programs, accountability models, and common staff relationship problems are examined.

TERG 6922 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 6923 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 6924 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 6926 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 6927 Practicum: Coaching for Effective Literacy Instruction 3 s.h. An application of literacy coach practices in assessment-based decisionmaking, research-based instruction, and preparation and delivery of highquality professional development using techniques for working with individual teachers in a coaching context and groups of teachers in whole-group PD settings

TERG 6928 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. Prereg.: TERG 6926.

Curriculum and Instruction

Dr. Lauren Cummins, Graduate Program Coordinator 2309 Beeghly College of Education (330) 941-7237 lcummins@ysu.edu

Introduction

The Master of Science in Education in Curriculum and Instruction is a totally online program, focusing on the development of professional practitioners committed to quality teaching and committed to the belief that all children can learn. Central to the development of such professionals is the refinement of competencies in the areas of teaching, learning, assessment, technology, and communication. Students admitted to this program will choose one of three specialization areas: literacy, digital teaching and learning, teacher leadership, along with general studies. The Literacy specialization will

support an increased depth of knowledge and skills in the area of language arts and reading. Digital Teaching and Learning will focus on the paradigm shift in teaching that utilizes technology as an effective tool in 21st-century classrooms, P-12. The specialized area of Teacher Leadership will support an increased depth of knowledge and skills in the area of informal and Formal Leadership in and out of the classroom and is aligned to the new Ohio Teacher Leadership Standards. The general studies option is for students who want to obtain a C&I degree without an area of specialization. Courses for general studies may come from any department at YSU and may, or may not, be offered online.

The program is delivered in a fully online format (https://online.ysu.edu/ degrees/education/).

For more information please contact the Teacher Education and Leadership Studies Office at (330)-941-3251.

Mission

The Department of Teacher Education and Leadership Studies' mission is to empower teachers for professional practice. The mission commits the faculty to a theme of critical reflective practice where candidates are engaged in activities that build on their knowledge, skills, and dispositions related to effective teaching. Faculty members are committed to educating practicing professionals in the areas of: scholarship, teaching, leadership, management, communication, and interpersonal relations. The Department also offers a variety of professional development courses and workshops.

Accreditation

The master's programs in Teacher Education are accredited by the National Council for Accreditation of Teacher Education (NCATE). http:// www.ncate.org/.

Curriculum and Instruction Program

The Curriculum & Instruction program is a comprehensive program completely related to curriculum and instruction in the classroom. Additionally, this programs gives students the opportunity to take other related courses of interest.

COURSE	TITLE	S.H.
Required Core		
TCED 6905	Introduction to Digital Teaching and Learning	3
TCED 6936	Curriculum, Assessment, and Instruction to Improve Learning	3
TCED 6933	Brain Based Teaching and Learning	3
TCED 6932	Action Research in Urban and Rural Education	3
Total Semester Hours		

Total Semester Hours

Areas of Specialization

COURSE	TITLE	S.H.
Digital Teaching an	d Learning	
TCED 6906	Designing Curriculum for the 21st Century Learner	3
TCED 6907	Literacy for Digital Teaching and Learning	3
TCED 6908	Digital Learning Environments	3
TCED 6910	Leadership for the 21st-Century	3
TCED 6911	Coding for Educators	3
TCED 6912	Gaming for Educators	3
Total Semester Hours		
COURSE Literacy	TITLE	S.H.
TERG 6922	Organizing and Managing Diverse Literacy Environments	3

Total Semester Hours

COURSE	TITLE	S.H.
Teacher Leadershi	D	
EDAD 6901	Instructional Leadership Beyond the Classroom	3
EDAD 6903	Building Capacity of Adult Learners	3
EDAD 6905	Culturally Responsive Teaching and Learning	3
EDAD 6906	Data-Coaching and Decision Making	3
EDAD 6933	Educational Leadership and Organizational Chang	e 3
EDAD 6954	Community Engagement and Collaborative Partnerships	3
Total Semester Hours		
COURSE	TITLE	S.H.
General Studies		
Eighteen semester consultation with a	hours of courses to be selected by student in advisor.	Total Semester Hours

Candidates must purchase a TaskStream account at the beginning of their studies, which is necessary for our accreditation through The Council for the Accreditation of Educator Preparation (CAEP).

All candidates must take and successfully pass the Comprehensive Examination which covers their coursework.

Maximum C Grade Policy

A student may count no more than 6 s.h. of coursework with a grade of C toward the minimum graduation hour requirements.

Learning Outcomes General Learning Outcomes

Candidates develop a deep understanding of the critical concepts and principles of their field of preparation and, by completion, are able to use professional specialty practices flexibly to advance the learning of all P-12 students toward attainment of college- and career- readiness. Candidates apply knowledge and skills appropriate to their professional field of specialization so that learning and development opportunities for all P-12 improved through:

- · applying data literacy;
- · using research and understanding of qualitative, quantitative and/or mixed methods research methodologies;
- · employing data analysis and evidence to develop supportive school environments:
- · reading and/or participating in collaborative activities with others such as peers, colleagues, teachers, administrators, community organizations, and parents;
- · supporting appropriate applications of technology for their field of specialization;
- · applying professional dispositions, laws, and policies, codes of ethics and professional standards appropriate to their field of specialization.

Advanced program completers learn and apply specialized content and discipline knowledge contained in approved state and/or national disciplinespecific standards.

Specific Specialization Outcomes

Teacher Leadership:

3

3

3

3

3

18

In this program you will learn to:

- · promote an inclusive, equitable, and collaborative culture among staff members
- · implement evidence-based strategies and research to improve practice and student learning.
- · facilitate professional learning by utilizing adult learning principles.
- · employ evidence-based leadership practices to drive school improvement initiatives
- · make effective data-based decisions which lead to school improvement.
- · strengthen relationships and partnerships with school and community stakeholders.
- · advocate for student learning and the teaching profession.

Digital Teaching and Learning:

In this program, you will learn to:

- · explore and embrace the new paradigm shift in digital teaching and learning that supports students to be entrepreneurs of their own learning.
- · meet the challenge of moving into a more personalized, student-centered approach to teaching.
- · identify and implement research-based teaching methods that enhance digital learning in P-12 classrooms and support 21st-century teaching and learning
- · evaluate, select, and integrate effective learning technologies to enhance student learning and prepare students for a digital world.
- · create digital learning environments that promote and sustain respectful digital citizens.
- · develop and utilize leadership skills that empower educators to be effective change agents in their schools and districts.

Literacy

In this program, you will learn to:

- establish and maintain a child-centered classroom culture that provides diverse learning opportunities, materials, and practices for all students.
- · develop a system of providing instructional support to peers using student data, observations, model teaching, conferencing, and staff development.
- assure that all aspects of literacy learning and usage are applied in every content area d. recognizing the developmental nature of spelling and phonics learning and use when selecting and critiquing resources and activities in order to sequence instruction.
- · incorporate all aspects of literacy assessment, curriculum development, materials selection, lesson design, instruction and self-reflection as a means to improving the learning of all students.
- apply a multifaceted approach to assessment as a means of obtaining authentic information about the strengths and needs of diverse students for the purposes of instructional decision-making.

Admission Requirements

In addition to the minimum College of Graduate Studies admission requirements, applicants must have the following:

· A bachelor's degree from a college or university certified by a regional accrediting agency approved by the U.S. Department of Education.

- Valid teaching license
- · Cumulative GPA in undergraduate work of at least a 2.7 on a 4.0 scale.
- Students with a GPA lower than 2.7 may be asked to present a satisfactory score on the general test of the GRE or other standardized test (scores of 150 verb.,148 quant., and 4.0 writing for the GRE). Instead of a standardized test, program directors can provide evidence that suggests the likelihood of success in the program for provisional admission.
- · 3 references that include: name, email and phone number

SPECIALIZATIONS

C & I Digital Teaching and Learning @ https://online.ysu.edu/degrees/ education/msed/curriculum-instruction-digital-teaching/

- · Complete online application for admission
- Pay \$45 application fee (\$90 International). Waived for active/veteran military members or for applicants who have attended the College of Graduate Studies in the past.
- Minimum 2.7 GPA
- Names and contact information for 3 professional references (in online application)
- Submit official transcripts of all undergraduate and graduate coursework
 from regionally accredited institutions
- Submit official scores for the Graduate Record Examination (GRE) or standardized test if required by program. Students will be notified if the program will require scores on a standardized test for additional evidence that will insure student success if GPA is lower than the 2.7 required.
- · Valid teaching certificate/license*

*Students w/o a teaching certificate or license may be admitted if they have documented evidence that they have taught for <u>at least 3-years</u> and are currently teaching in a classroom.

Teacher Leader

Admissions @ https://online.ysu.edu/degrees/education/msed/curriculuminstruction-teacher-leader/

- · Complete online application for admission
- Pay \$45 application fee (\$90 International). Waived for active/veteran military members or for applicants who have attended the College of Graduate Studies in the past.
- Minimum 2.7 GPA
- Names and contact information for 3 professional references (in online application)
- Submit official transcripts of all undergraduate and graduate coursework from regionally accredited institutions
- Submit official scores for the Graduate Record Examination(GRE) or standardized test if required by program. Students will be notified if the program will require scores on a standardized test for additional evidence that will insure student success if GPA is lower than the 2.7 required.
- · Valid teaching certificate/license

LITERACY @ https://online.ysu.edu/degrees/education/msed/curriculuminstruction-education-literacy/

- · Complete online application for admission
- Pay \$45 application fee (\$90 International). Waived for active/veteran military members or for applicants who have attended the College of Graduate Studies in the past.
- Minimum 2.7 GPA
- Names and contact information for 3 professional references (in online application)
- Submit official transcripts of all undergraduate and graduate coursework
 from regionally accredited institutions

- Submit official scores for the Graduate Record Examination (GRE) or standardized test if required by program. Students will be notified if the program will require scores on a standardized test for additional evidence that will insure student success if GPA is lower the than 2.7 required.
- Valid teaching certificate/license

Master of Science in Engineering

The Rayen School of Engineering, as part of the College of Science, Technology, Engineering, and Mathematics, offers a graduate program leading to the Master of Science degree in engineering. Admission to any of the five engineering options, including chemical, civil and environmental, electrical, industrial and systems, and mechanical engineering, is granted to qualified applicants who have been judged to have a good chance of succeeding in the program and obtaining a graduate degree. Several technical concentration areas are available in each option. Students may select a thesis, non-thesis, or management curriculum plan. These opportunities serve the practicing engineer, as well as the student, who wants to pursue advanced graduate study and research. Courses offered on campus are usually held during the evenings. The educational opportunities include traditional classroom and laboratory courses, seminars, and research projects guided by experienced members of the graduate faculty.

Teaching or research assistantships are available to qualified applicants on a competitive basis upon review and recommendation by the home department. In addition, the College of Graduate Studies may offer scholarships or grantsin-aid to qualified students. Students desiring assistantships or scholarships must submit an application to the College of Graduate Studies by the specified deadlines.

This description provides an overview of admission and degree requirements, advising, and program plans. Information concerning course scheduling and prospective course offerings can be obtained from the YSU website or the individual engineering departments. Further assistance with any matter related to engineering graduate programs may be obtained by telephone, email, or personal visit to the program option coordinator in the student's area of interest.

Graduate Assistantships

Students interested in a graduate assistantship position must submit a separate application along with three letters of recommendation to the College of Graduate Studies. Further details are provided elsewhere in the Graduate Catalog under Financial Assistance. The College of Graduate Studies will forward the application to the department. Each engineering department has established a process for evaluating applicants. Applicants should contact the option coordinator in their field of interest for details. Final recommendations are forwarded to the dean of the College of Graduate Studies. Applicants are notified by mail of the dean's decision.

In cases where the applicant is not fully prepared for their intended graduate program, completion of undergraduate deficiency courses may be required. This is common when the applicant's undergraduate degree is in a different discipline than the intended graduate program. Such applicants may be granted provisional admission as long as they require no more than 9 semester hours of undergraduate deficiency courses. In addition, some programs may require stronger evidence of academic ability (e.g. higher GPA) for applicants having undergraduate degrees outside the discipline.

Non-Degree Admission

Students meeting all requirements for admission to the College of Graduate Studies, but who do not intend to pursue a Master of Science degree, may apply for non-degree admission. In addition, an applicant whose academic record does not meet the required standards for admission to a Master of Science program may apply for non-degree admission to the College of Graduate Studies. For students wishing to pursue a Master of Science in Engineering degree, non-degree admission provides an opportunity to demonstrate his/her academic capability. Non-degree students completing nine semester hours of appropriate graduate courses with grades of B or better may apply for admission to a specific engineering degree option with regular or provisional status to continue his/her study for the Master of Science in Engineering.

Advisement

The Rayen School of Engineering requires an advisor for each individual graduate student. An advisor is recommended by the option coordinator in the student's discipline and assigned by the College of Graduate Studies upon acceptance. It is the responsibility of the student to initiate contact with his or her advisor, and this should be done as soon as possible before registering for the first time and at the time of course registration each semester. The student, with the help of his or her advisor, shall develop a study plan that includes goals and desired outcomes, and a coursework plan. The plan may be revised, if necessary, as the study progresses, with the approval of the advisor and option coordinator.

Chemical Engineering

Holly J. Martin, Ph.D., Associate Professor Corrosion studies; modification of metal surfaces to strongly adhere polymeric coatings for corrosion resistance

Byung-Wook Park, Ph.D., Assistant Professor

Engineered biohybrid materials for biomedical applications;biohybrid microswimmers for drug delivery and bioimaging;wearable bioelectronics for chronic wound monitoring; smart wound dressing

Civil and Environmental Engineering

Richard Albert Deschenes, Jr., Ph.D., Assistant Professor Materials science; concrete durability and materials; applied mechanics

AKM Anwarul Islam, Ph.D., Professor

Impact of blast on highway bridges; use of CFRP in enhancing structural strength of concrete members; structural health monitoring of bridges using wireless sensor network

Suresh Sharma, Ph.D., Associate Professor

Complex hydrologic and water quality modeling using various types of data driven, conceptual, physically based and distributed and semi-distributed watershed models in climate change/variability context

Electrical and Computer Engineering

Frank Xiying Li, Ph.D., Professor, Chair

Electron spin resonance imaging; EMC, RF, and software engineering; networks; applied magnetic fields

Industrial and Systems Engineering Mechanical Engineering

S. Cory Brozina, Ph.D., Assistant Professor

Student support and success in engineering; learning analytics; first-year engineering

Kyosung Choo, Ph.D., Associate Professor

Heat and mass transfer; multiphase flow; phase change phenomena; data center cooling; energy audit of buildings; microchannel heat exchangers; linear friction welding; laser welding; kinetics of human body performance

Hazel Marie, Ph.D., Professor

FEA/CFD modeling applied to solid-fluid interaction of thin film lubrication sealing; mechanical material modeling of soft biological tissue

Stefan Moldovan, Ph.D., Assistant Professor

Multi-scale computational fluid dynamics; experimental techniques as applied to crystal growth within reactors, finger seals, hydrodynamic bearings and dampers; wet friction materials in torque converters

Jae Joong Ryu, Ph.D., Associate Professor

Effect of process induced anisotropic microstructure on sliding contact fatigue damage of titanium alloy joint implants; mechanical load assisted dissolution response of medical#grade metals and alloys

Elvin B. Shields, Ph.D., Professor

Mechanical vibrations; fracture mechanics; kinematics; the scholarship of teaching and learning

Virgil C. Solomon, Ph.D., Professor

Synthesis of shape memory alloys, ceramic-metal composites and nanostructures and their characterization using metallography, thermal analysis and analytical scanning and transmission electron microscopy techniques

Master of Science in Engineering in Chemical Engineering

Option Coordinator

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Option Description

Chemical engineers apply scientific and engineering knowledge to design and produce a wide variety of consumer and industrial products, including food, fuels, plastics, pharmaceuticals, etc. Chemical engineers find exciting global career opportunities in the chemical, biomedical, nuclear, pharmaceutical, and energy fields. Graduate study in chemical engineering provides students with the scientific and professional knowledge necessary for their field of interest and develops student abilities to formulate solutions to new and complex problems in the context of current environmental, social, and economic considerations. These objectives are accomplished by flexible plans of study designed to meet the needs of the program's graduate students. The Chemical Engineering program offers five different plans, including thesis, non-thesis, engineering management, internship, and an accelerated 4+1 MSE plans.

Facilities for advanced study and research are located in Moser Hall, which houses a variety of well-equipped laboratories. These include the heat transfer lab, distillation lab, and biochemical engineering lab. In addition, the college computer lab provides access to a large number of modern PCs with high-speed internet connections.

Admission Requirements DEGREE PROGRAMS

Applicants must meet all of the general requirements for admission to the College of Graduate Studies. Admission to the program is selective and based on the qualifications of the applicant, the needs of the program, and the availability of funding. Applicants with lesser qualifications may be granted provisional graduate student status based on evaluation of their undergraduate records, standardized test (e.g. GRE) results, work experience, and other professional qualifications. Graduate assistantship is offered to highly qualified applicants based on the needs of the program and the availability of funding.

The Master of Science in Engineering may be characterized as being both career-oriented and flexible. Five different program plans are available to accommodate the needs of nearly every engineering graduate student. Graduate students enrolled in the Chemical Engineering graduate program must complete:

- · 30 semester hours for the thesis plan,
- · 33 semester hours for the nonthesis plan,
- · 33 semester hours for the management plan,
- · 30 semester hours for the internship or industrial project plan, or
- · 30 semester hours for the Accelerated 4+1 plan.

*The accelerated 4+1 MSE plan is only available to students already in the YSU Chemical Engineering undergraduate program.

The degree requirements consist of core courses, technical courses, graduate internships, and thesis or project courses. The management plan requires a series of business courses. The internship plan requires 6-9 semester hours of graduate-level internship courses. The graduate internship must be in the chemical engineering discipline and comparable to graduate course work. These degree programs are designed to provide graduate students with the knowledge and skills to excel in professional careers and/or pursue a PhD in Chemical Engineering. To obtain a list of core and technical course required in the Chemical Engineering program, students should contact the Graduate Program Coordinator.

Program Plans

Thesis Plan

Graduate students choosing the thesis plan are required to complete 30 semester hours of graduate coursework. This generally consists of:

- · 15 semester hours of core courses,
- · 9 semester hours of technical concentration courses, and
- · 6 semester hours of thesis.

This plan is strongly recommended for all candidates who wish to continue their graduate studies beyond the master's degree. The thesis provides firsthand research experience with experimental design, literature searches, research methodology, technical report writing, and oral presentation of research results. Additionally, the thesis option can lead the graduate student to a higher level of expertise in the chosen area of specialization. Students enrolled in this plan are required to have a thesis proposal approved by their faculty advisor and the Graduate Program Director before the end of their second semester in the Chemical Engineering graduate program.

Non-thesis Plan

The non-thesis plan is designed for students who wish to enhance their knowledge and skills to succeed in careers as practicing engineers, but are unlikely to pursue a PhD. A total of 33 semester hours of coursework is required for this plan. In addition to 15 semester hours of core courses, every student enrolled in this option is required to complete 15 semester hours of technical courses related to their discipline, and a 3-semester-hour graduate project course, under the guidance of a faculty advisor. Students enrolled in this plan are required to have a project proposal approved by their faculty advisor and the Graduate Program Director before the end of their second semester in the Chemical Engineering graduate program. A graduate student enrolled in a graduate project course will be required to defend the results of his or her project by giving a presentation to the engineering faculty and students.

Management Plan

Students who have been in the work arena and are moving into an engineering management role may wish to choose the management plan. A total of 33 semester hours of coursework is required for this plan. This consists of:

- · 15 semester hours of core courses,
- · 9-12 semester hours of business courses,
- · 6-9 semester hours of technical courses, and
- · a 3-semester-hour graduate project.

Students enrolled in this plan are required to have a project proposal approved by the faculty <u>advisor</u> and the Graduate Program Director before the end of their second semester . A graduate student enrolled in a graduate project course will be required to defend the results of his or her project by giving a presentation to the engineering faculty and students. <u>Students with the</u> <u>Management Plan should consult the Graduate Program Director and the</u> faculty advisor to develop their course plan.

INTERNSHIP PLAN

This option is suitable for students who would like to gain practical experience in the industry before graduating with a master's degree. A total of 30 semester hours of coursework is required for this plan. The internship plan consists of:

- 15 semester hours of core courses,
- · 9 semester hours of technical courses, and
- · 6-9 semester hours of graduate-level internship courses.

Students enrolled in this plan are required to have an internship proposal approved by the Graduate Program Director before the end of their second semester into the program. The graduate internship must be approved by the Chemical Engineering Graduate Program Director on a case by case basis for graduate course credit. The internship shall be in the chemical engineering discipline and be comparable to graduate course work. The graduate internship will require at least 400 hours of work for 3 semester hours of graduate credit, 300 hours of work for 2 semester hours of graduate credit, and 200 hours of work for 1 semester hour of graduate credit. Internship students are strongly encouraged to consult with the STEM Professional Practices Office to seek internship opportunities.

Accelerated 4+1 MSE PLAN

Undergraduate students already in the YSU Chemical Engineering undergraduate program can apply for admission into the accelerated 4+1 MSE in the Chemical Engineering graduate program after completing 78 semester hours with a GPA of 3.3 or higher. After being admitted into the accelerated 4+1 MSE program, students will be allowed a maximum of nine semester hours of graduate coursework to be double-counted towards both bachelor's and master's degrees upon approval by the Graduate Program Director. An additional three hours of graduate coursework can be completed as an undergraduate and used exclusively for graduate credit.

Chemical Engineering Requirements

At the time of initial enrollment, the student will select a program plan (thesis, non-thesis, management, or internship) and technical area of interest (e.g. chemical processes, biochemical, environmental, materials) available through faculty expertise and consultation. The degree requirements for each plan are listed above under Program Plans. Lists of required courses and possible electives are shown below.

In cooperation with an assigned faculty advisor, each student will establish a set of academic goals and desired outcomes, and a coursework plan to meet those objectives. Upon completion of the graduate program, all students will complete either a written or an oral assessment of the effectiveness of the program in meeting their established goals and outcomes.

Thesis students who have registered for all required thesis hours and have completed all course requirements but have not finished the thesis are required to maintain current student status if they expect to utilize any University service (e.g., parking, computers, library, advisors' assistance, thesis defense, etc.). This can normally be accomplished by registering for at least one hour of thesis credit.

COURSE	TITLE	S.H.
Core Courses		15
		Total
		Hours
MATH 6910	Advanced Engineering Mathematics 1	3

MATH 6911	Advanced Engineering Mathematics 2	3
CHEN 6981	Advanced Chemical Reaction Engineering	3
CHEN 5811	Advanced Transport Phenomena	3
CHEN 5800M	Special Topics Advanced Chemical Engineering Thermodynamics	3
Technical Courses Examples		Select

		20
		Courses
CHEN 5845	Corrosion Engineering	3
CHEN 5821	Fundamentals of Polymer Science	3
CHEN 5805	Principles of Biomedical Engineering	3
CHEN 5800E	Special Topics Material Science and Engr	3
MECH 6915	Failure Analysis	3
STAT 6943	Mathematical Statistics 1	3
STAT 6944	Mathematical Statistics 2	3
STAT 6949	Design and Analysis of Experiments	3
Choose One:		Minimum Required
CHEN 6990	Thesis	6
CHEN 5800	Special Topics	3
STEM 5890	STEM Graduate Internships	6

Learning Outcomes

- · an ability to formulate and solve advanced engineering problems;
- an ability to apply advanced knowledge of chemistry, biology and/or material science in chemical engineering.
- · an ability to design and conduct research projects;
- · technical writing and oral communication skills.

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 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.

2-3

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, electro-chemistry, 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.

CHEN 6981 Advanced Chemical Reaction Engineering 3 s.h.

Advances topics in chemical reaction engineering including non-elementary reaction kinetics, reactor design for autocatalytic reactions, temperature and energy effects in chemical reactions, heterogeneous catalysis, catalyst preparation, fabrication and activation. **Prereq.:** CHEN 4880.

Prereq.: CHEN 4880.

CHEN 6983 Modern Power Sources 3 s.h.

Analytical and descriptive study of modern power plants. Combustion and environmental problems with fossil-fueled power plants. Electromagnetic circuits and devices with emphasis on the principles of electromechanical energy conversions.

CHEN 6984 Nuclear Fission and Fusion Power Sources 3 s.h.

Energy available from fission and fusion nuclear reactions, on setting and maintaining chain reaction. Mechanical and electromagnetic confinement techniques. Reactor design, heat removal, and safety problems.

CHEN 6985 Electromechanical Motion Devices 3 s.h.

Thermodynamics of batteries, and electric and fuel cells. Power from nuclear isotopes. Features common to rotating electromagnetic fields. Analysis and design of electromechanical power components.

CHEN 6990 Thesis 1-9 s.h.

Research selected and supervised by departmental advisor. May be repeated for a maximum of nine semester hours.

Prereq.: Acceptance by departmental committee.

Master of Science in Engineering in Civil and Environmental Engineering

Graduate Program Director

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Program Description

Civil and environmental engineers apply scientific and engineering knowledge to protect and improve the infrastructure, public health, and the natural and built environment. Graduate study in Civil and Environmental Engineering (CEE) provides students with advanced scientific and engineering knowledge in their field of interest, and develops their abilities to formulate solutions to new and complex problems in the context of current social, global, environmental, and economic considerations. These objectives are accomplished by flexible plans of study designed to meet the needs of graduate students. Graduates find fulfilling careers in public and private industries and consulting practices, and are prepared for doctoral-level work leading to research/teaching careers. The CEE program offers five different plans - thesis, non-thesis, management, internship and accelerated 4+1 MSE. It offers advanced courses in all five sub-disciplines based on faculty expertise:

- · Structural engineering
- · Geotechnical engineering
- Transportation engineering
- Environmental engineering
- · Water resources engineering

Facilities for advanced study and research are located in Moser Hall, which houses a variety of well-equipped laboratories. These include the Graduate Research Lab, Strength of Materials Lab, Hydraulics/Fluid Mechanics Lab, Environmental Engineering Lab, Geotechnical Engineering Lab, Surveying Lab, and Concrete Mixtures Lab. In addition, the STEM College Open Computer Lab provides access to a large number of modern workstations equipped with high-speed internet connections and latest software for modeling in various fields of research. The Graduate Research Lab is equipped with state-of-the-art computers and necessary modeling software for research.

Admission Requirements

DEGREE PROGRAMS

Applicants must meet all of the general requirements for admission to the College of Graduate Studies. Admission to the program is selective and based on the academic and professional qualifications of the applicant. Although GRE is not required for admission, applicants with lesser qualifications may be granted provisional graduate student status based on the evaluation of their undergraduate transcripts, standardized test (e.g., GRE) results, work experience, and other professional qualifications. Graduate assistantship is offered to highly qualified applicants based on the needs of the program and the availability of funding.

The Master of Science in Engineering (MSE) may be characterized as being both career-oriented and flexible. Five different program plans are available to accommodate the needs of nearly every engineering graduate student. Graduate students enrolled in the CEE graduate program must complete:

- · 30 semester hours for the thesis plan,
- · 33 semester hours for the non-thesis plan,
- · 33 semester hours for the management plan,
- · 30 semester hours for the internship plan, or
- 30 semester hours for the accelerated 4+1 MSE plan*.

*The accelerated 4+1 MSE plan is only available to students already in the YSU Civil Engineering undergraduate program.

The degree requirements consist of core courses, technical courses, graduate internships, and thesis or project courses. The management plan requires a series of business courses. The internship plan requires 6-9 semester hours

of graduate-level internship courses. The internship must be in the civil and environmental engineering discipline, be comparable to a graduate course work, and have to approved by the Graduate Program Director.

These degree programs are designed to provide graduate students with the knowledge and skills necessary to excel in professional careers and/or to pursue a PhD or doctoral degree in Civil Engineering. To obtain a list of core and technical courses required in the CEE graduate program, students should contact the Graduate Program Director.

Program Plans

Thesis Plan

Graduate students choosing the thesis plan are required to complete 30 semester hours of graduate coursework. This generally consists of:

- · 6-9 semester hours of core courses,
- · 15-18 semester hours of technical concentration courses, and
- 6 semester hours of thesis.

This plan is strongly recommended for all candidates who wish to continue their graduate studies beyond the master's degree. The thesis provides firsthand research experience with experimental design, literature searches, research methodology, technical report writing, and oral presentation of research results. Additionally, the thesis option can lead the graduate student to a higher level of expertise in the chosen area of specialization. Students enrolled in this plan are required to have a thesis proposal approved by the faculty advisor and the Graduate Program Director before the end of their second semester into the CEE graduate program.

Non-thesis Plan

The non-thesis plan is designed for students who wish to enhance their knowledge and skills to succeed in careers as practicing engineers, but are unlikely to pursue a PhD or a doctoral degree. A total of 33 semester hours of coursework is required for this plan. In addition to 6-9 semester hours of core courses, every student enrolled in this plan is required to complete 21-24 semester hours of technical courses related to their discipline, and a 3 semester hours of graduate project. Non-thesis students must complete the graduate project under the guidance of a faculty advisor. Students enrolled in this plan are required to have a project proposal approved by the faculty advisor and the Graduate Program Director before the end of their second semester into the CEE graduate program. Graduate students enrolled in a graduate project course will be required to defend the results of his or her project by giving a presentation to the engineering faculty and students.

Management Plan

Students who have been in the work arena and are moving into an engineering management role may wish to choose the management plan. A total of 33 semester hours of coursework is required for this plan. This consists of:

- · 6-9 semester hours of core courses,
- · 9-12 semester hours of business courses,
- · 12-18 semester hours of technical courses, and
- · 3 semester hours of graduate project.

Students enrolled in this plan are required to have a project proposal approved by the faculty advisor and the CEE Graduate Program Director before the end of their second semester into the program. A graduate student enrolled in a graduate project course will be required to defend the results of his or her project by giving a presentation to the engineering faculty and students. Students with the Management Plan should consult the Graduate Program Director and the faculty advisor to develop their course plan.

INTERNSHIP PLAN

This option is suitable for students who would like to gain practical experience in the industry before graduating with a master's degree. A total of 30 semester hours of coursework is required for this plan. The internship plan consists of:

- 6-9 semester hours of core courses,
- · 12-15 semester hours of technical courses, and
- · 6-9 semester hours of graduate-level internship courses.

Students enrolled in this plan are required to have an internship proposal approved by the Graduate Program Director before the end of their second semester into the program. The graduate internship must be approved by the CEE Graduate Program Director on a case by case basis for graduate course credit. The internship shall be in the civil and environmental discipline and be comparable to a graduate course work. Graduate internship in responsible charge will require at least 400 hours of work for 3 semester hours of graduate credit, 300 hours of work for 2 semester hours of graduate credit, and 200 hours of work for 1 semester hour of graduate credit. Internship students are strongly encouraged to consult with the STEM Professional Practices Office to seek internship opportunities.

Accelerated 4+1 MSE PLAN

Undergraduate students already in the YSU Civil Engineering undergraduate program can apply for admission into the accelerated 4+1 BE/MSE in Civil and Environmental Engineering track after completing 78 semester hours with a GPA of 3.3 or higher. After being admitted into the accelerated 4+1 BE/MSE track, students will be allowed a maximum of nine semester hours of graduate coursework to be double-counted towards both bachelor's and master's degrees upon approval by the Graduate Program Director. An additional three hours of graduate coursework at 6000 level can be completed as an undergraduate and used exclusively for graduate credit.

Civil and Environmental Engineering Requirements

At the time of initial enrollment, the student will select a program plan (thesis, non-thesis, management, or internship) and research area (structural, geotechnical, transportation, environmental, water resources) available through faculty expertise and consultation. The general requirements for each plan are listed above under Program Plans. Lists of required courses and possible electives for each plan are shown below.

Graduate students must meet the Graduate Program Director each semester before registering for courses. In cooperation with an assigned faculty advisor and the Graduate Program Director, each student will establish a set of academic goals and desired outcomes, and a coursework plan to meet those objectives. Upon completion of the graduate program, all students will complete either a written or an oral assessment of the effectiveness of the program in meeting their established goals and outcomes.

Thesis students, who have registered for all required thesis hours and have completed all course requirements but have not finished the thesis, are required to maintain current student status if they expect to utilize any University service (e.g., parking, computers, library, advisors' assistance, thesis defense, etc.). This can normally be accomplished by registering for at least one semester hour of thesis credit.

COURSE	TITLE S.H.
Core Courses	6
MATH 6910	Advanced Engineering Mathematics 1
MATH 6911	Advanced Engineering Mathematics 2
Technical Courses allowed)	(only one course outside the CEE graduate program is15-18
CEEN 5820	Pavement Material and Design
CEEN 5829	Civil Engineering Materials - Concrete
CEEN 5832	Natural Systems Engineering
CEEN 5836	Environmental Water Chemistry
CEEN 5837	Environmental Engineering Design
CEEN 5849	Structural Analysis 2
CEEN 5855	Reinforced Concrete Design

CEEI	N 5856	Steel Design	
CEEI	N 5869	Design of Air Pollution Control Systems	
CEEI	N 5880	Advanced Hydraulics	
CEE	N 5882	Foundation Engineering	
CEEI	N 5883	Bridge Engineering	
CEE	N 5884	Solid and Hazardous Waste Management	
CEEI	N 6956	Advanced Soil Mechanics	
CEE	N 6958	Structural Dynamics	
CEEI	N 6965	Special Topics	
CEE	N 6967	Biological Treatment Processes	
CEEI	N 6973	Watershed Modeling	
CEE	N 6977	Hydrology	
CEEI	N 6979	Water Quality Modeling	
CHE	N 5820	Industrial Pollution Control	
ENS	T 5830	Toxicology and Risk Assessment	
GEO	G 6901	Introduction to Geographic Information Science	
GEO	G 6903	Advanced Geographic Information Science	
MEC	H 5884	Finite Element Analysis	
Choose	one:		6
CEE	N 6990	Thesis	
CEEI	N 6989	Graduate Projects	
STE	M 5890	STEM Graduate Internships	
Total H	ours		30-33

Student Learning Outcomes (SLO): Civil and Environmental Engineering

At the time of graduation from the Civil and Environmental Engineering graduate program, students should be able to demonstrate:

(a) advanced technical knowledge in one or more civil and environmental engineering subdiscipline(s)

(b) proficiency in scholarly research

(c) effective oral and written communication skills

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.

Prereg.: 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, beamcolumns, 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.

CEEN 6910 Advanced Strength of Materials 3 s.h.

The basic methods of structural mechanics, such as conditions of equilibrium and compatibility, stress-strain relations. General treatment of energy principles including virtual work, minimum potential energy; applications to statically determinate and indeterminate systems such as rings, curved beams, plates, and other elastic systems.

CEEN 6920 Wetlands Engineering 3 s.h.

Wetland characteristics-soils, hydrology, and vegetation; wetland functions and values; regulations; planning, theory, design and construction of created and constructed wetlands; applications in wetland mitigation, wastewater treatment, and pollution control.

Prereq.: CEEN 3736 Fundamentals of Environmental Engineering or equivalent.

CEEN 6921 Groundwater and Surface Water Modeling 3 s.h.

Mathematical simulation of hydrodynamic processes and pollutant transport in subsurface and surface water environments. Prereg.: CEEN 3716 Fluid Mechanics and CEEN 3736 Fundamentals of

Environmental Engineering.

CEEN 6930 Sediment and Contaminant Transport 3 s.h.

Understanding of sediment and contaminant transport in fluvial environments. Topics include sediment characteristics, incipient motion, scour, bankfull discharge, advection, and mixing. Prereq.: CEEN 3717 or equivalent.

CEEN 6941 Structural Mechanics 3 s.h.

Study of beams under lateral load; beams with combined lateral load and thrust; buckling beams on elastic foundations; applications of Fourier series and virtual work principles to beam type structures; stress and strain in three dimensions; applications to flexure of beams and plates and to constrained torsion; elements of engineering theory of plates.

CEEN 6947 Finite Element Analysis 3 s.h.

An introduction to finite element techniques as applied to problems in structural mechanics. Direct and variational methods of element formulation with application to beams, beam columns, frames, arches, thin plates, and shells.

CEEN 6951 Construction Project Management 3 s.h.

An integrated approach to construction project management. Advanced topics of Program Evaluation and Review Technique (PERT) and Critical Path Method (CPM) and its application in construction project scheduling. Resource allocation and leveling, construction cost control, computer simulation of construction operations, and expert systems construction.

CEEN 6952 Foundation Engineering 3 s.h.

Principles of mechanics of materials applied to foundation problems; stresses and deformations in soils, consolidation theory; shallow and deep foundation design.

CEEN 6953 Flow Through Porous Media 3 s.h.

Analysis of seepage volume and stresses due to flow of water through soils in connection with dams, slopes, excavations, subsurface drainage, and wells.

CEEN 6956 Advanced Soil Mechanics 3 s.h.

Development of shear strength theories, Mohr-Coulomb-Hvorslev equation, critical path concept, stability of slopes, lateral earth-pressure theories, development of bearing capacity equations. Prereq.: CEEN 4881 or equivalent.

CEEN 6957 Structural Stability 3 s.h.

A study of the elastic stability of engineering structures, beam columns, static buckling of elastic beams, frames, plates, and shells, dynamic stability of beams and plates.

CEEN 6958 Structural Dynamics 3 s.h.

Analysis of the response of structures to air blasts and earthquake motions; development of both the normal mode and frequency response methods in dealing with periodic and nonperiodic excitations.

CEEN 6959 Advanced Steel Design 3 s.h.

Advanced topics in the structural design of girders, frames, and trusses. Light gauge metal structures. Use of modern alloys and hybrid systems.

CEEN 6961 Advanced Concrete Design 3 s.h.

Consideration of advanced design techniques for reinforced concrete members and structures such as composite and prestressed concrete beams, box girders, and slabs.

CEEN 6965 Special Topics 3 s.h.

The application, in civil engineering, of special topics selected by the faculty from fields of current research interest or special emphasis. May be repeated up to six semester hours.

CEEN 6967 Biological Treatment Processes 3 s.h.

Theory and design of biological processes used in the treatment of municipal and industrial wastewaters, and in the remediation of hazardous wastes. Prereq.: CEEN 3736.

CEEN 6972 Advanced Topics in Environmental Engineering 3 s.h.

Advanced concepts related to the transport, reaction, phase distribution, and fate of pollutants in both the natural environment and treatment systems. **Prereq.:** CEEN 3736.

CEEN 6973 Watershed Modeling 3 s.h.

Application of hydrologic principles for modeling point and non-point source pollution at the watershed scale; the nutrient and sediment transport simulation using SWAT model; understanding the fundamental processes of pollutant movement through the soils and overland flow; application of data driven modeling in Water Resources Engineering.

CEEN 6975 Physical and Chemical Treatment Processes 3 s.h.

Theory and design of physical and chemical processes used in the treatment of water supplies, wastewater, and hazardous wastes. **Prereq.:** CEEN 3736.

CEEN 6976 Design of Small Dams 3 s.h.

Flood routing, reservoir engineering. Hydraulic design of small gravity, earth fill and rock fill dams, spillways, and energy dissipaters. **Prereq.:** CEEN 3717 and CEEN 6977.

CEEN 6977 Hydrology 3 s.h.

Precipitation; hydrologic abstractions; runoff; urban and small watershed hydrology; frequency analysis; digital simulation.

CEEN 6978 Water Resources Policy and Management 3 s.h.

International, national, and local water resources case studies, laws, policies, and management strategies are discussed. The need and demand for water; technical, economic, financial, social, environmental, and political considerations; data requirements; multipurpose projects.

CEEN 6979 Water Quality Modeling 3 s.h.

Mathematical modeling of physical, chemical, and biological processes in natural systems; development of computer models to simulate the fate and transport of pollutants in lakes, streams, and estuaries; application of models to evaluate water resource management options.

Prereq.: CEEN 3736 Fundamentals of Environmental Engineering.

CEEN 6989 Graduate Projects 1-3 s.h.

Special projects involving research, analysis, design, or other independent investigation, undertaken by the M.S. student under the direction of a graduate faculty member with the approval of the department chair. Credit will be determined in each case based on the nature and extent of the project.

CEEN 6990 Thesis 1-9 s.h.

Hours arranged. May be repeated.

Master of Science in Engineering in Electrical and Computer Engineering

Electrical and Computer Engineering

Option Coordinator

Frank X. Li Moser Hall (330) 941-3381 xli@ysu.edu (jjalali@ysu.edu)

Option Description

The Rayen School of Engineering provides opportunities for post accalaureate study toward the Master of Science in Engineering. These opportunities serve the practicing engineer as well as the student who wants to pursue advanced graduate study and research. Thesis, non-thesis, management, Internship or industry Project, and Accelerated (4+1) plans are available. Areas of study include control systems, digital systems, computer engineering, RF communications, computer-aided design, device and circuit modeling, solid-state devices, sensors, power systems and energy, power electronics, electromagnetic fields, electromechanical systems, and system analysis and design. The student is encouraged to interact with the faculty and explore these opportunities.

The Master of Science in Engineering may be characterized as being both career-oriented and flexible. Program plans and options are available to accommodate the needs of nearly every engineering graduate student. Graduate students enrolled in any of the engineering graduate programs must complete:

- · 30 semester hours for the thesis plan,
- · 30 semester hours for the non-thesis/course plan,
- · 33 semester hours for the management plan,
- · 30 semester hours for the internship or industry project plan, or
- 30 semester hours for the Accelerated (4+1) MSE plan*.

*The accelerated 4+1 MSE plan is only available to students already in the YSU Electrical Engineering undergraduate program.

The degree requirements consist of core courses, technical courses, and project courses. The management plan also requires a series of business courses. These degree programs are designed to provide graduate students with the knowledge and skills to excel in professional careers and/or pursue a Ph.D. or doctorate degree in engineering. To obtain a list of core and technical course requirements for a particular engineering discipline, students should contact the option coordinator for the program of interest.

Program Plans

Thesis Plan

Graduate students choosing the thesis plan are required to complete 30 semester hours of graduate coursework.

COURSE Mathematics, Con	TITLE nputer Science and Business Courses	S.H. 6 s.h.
MATH 6910	Advanced Engineering Mathematics 1	0.111
MATH 6911	Advanced Engineering Mathematics 2	
or		
CSCI 6901	Principles of Computer Programming	
or		
CSCI 6951	Data Science and Machine Learning	
Master Thesis		6 s.h.
ECEN 6990	Thesis	
Electrical and Com level.	nputer Engineering Courses ^{A minimum} of 9 s.h. must be 6900	18 s.h.

This plan is strongly recommended for all candidates who wish to continue their graduate studies beyond the master's degree. The thesis provides firsthand experience with experimental design, literature searches, research methodology, technical report writing, and oral presentation of results. Additionally, the thesis option can lead the graduate student to a higher level of expertise in the chosen area of specialization.

Non-thesis/Course Plan

The non-thesis plan is designed for students who wish to enhance their knowledge and skills to succeed in careers as practicing engineers, but are unlikely to pursue a Ph.D. or doctorate degree. A total of 30 semester hours of coursework is required for this plan. In addition to 6 semester hours of core courses, every student enrolled in this option is required to complete 21 semester hours of technical courses related to their discipline, and a 3-semester-hour graduate project course. A graduate student enrolled in a

graduate project course will be required to defend the results of his or her project by giving a presentation to the engineering faculty and students.

COURSE	TITLE	S.H.
Mathematics, Cor	nputer Science and Business Courses	6
		s.h.
MATH 6910	Advanced Engineering Mathematics 1	
MATH 6911	Advanced Engineering Mathematics 2	
or		
CSCI 6901	Principles of Computer Programming	
or		
CSCI 6950	Advanced Database Design and Administration	
Seminar Course		3
		s.h.
ECEN 6900	Seminar	
Electrical & Computer Engineering Courses ^{A minimum} of 9 s.h. must be 6900 level.		

Management Plan

Students who have been in the work arena and are moving into an engineering management role may wish to choose the management plan. A total of 36 semester hours of coursework is required for this plan. This consists of:

- · 9 semester hours of core courses,
- · 9 semester hours of business courses,
- · 15 semester hours of technical courses, and
- a 3-semester-hour graduate project.

COURSE	TITLE	S.H.
Mathematics, Computer Science		9
		sh

			S.II.
	MATH 6910	Advanced Engineering Mathematics 1	
	MATH 6911	Advanced Engineering Mathematics 2	
	CSCI 6901	Principles of Computer Programming	
0			
	CSCI 6950	Advanced Database Design and Administration	
B	usiness Courses		9 s.h.
S	eminar Course		3 s.h.
	ECEN 6900	Seminar	
Electrical & Computer Engineering Courses ^{A minimum} of 9 s.h. must be 6900 level.			15 s.h.

Accelerated (4+1) MSE PLAN

A total of 30 semester hours of coursework is required for this plan. This consists of:

- · 6-9 semester hours of core courses,
- · 18-21 semester hours of technical courses, and
- · 3 semester-hour graduate project or 6 semester-hour Thesis

Undergraduate students can apply for admission into the accelerated program for the MSE in Electrical and Computer Engineering after completing 78 semester hours with a GPA of 3.3 or higher. After being admitted into the 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. The courses chosen to count for both undergraduate and graduate coursework must be approved by the Graduate Program Coordinator upon admission into the program. An additional three hours of graduate coursework can be completed as an undergraduate and used exclusively for graduate credit.

Learning Outcomes: Electrical and Computer Engineering

The graduate program offers diverse educational opportunities with its highstandard multidisciplinary curriculum and prepares its students to:Advance their mathematical knowledge and application of electrical and computer engineering;

- · Obtain depth of knowledge in specific electrical engineering disciplines;
- · Conduct research and develop new ideas for engineering practice;
- · Understand methodologies and their applications;
- · Enhance their technical writing and oral communication skills

ECEN 5807 Advanced Digital and Analog Circuits 3 s.h.

Chip circuitry for devices such as BJT, 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 5820 Function, Design, and Application of Medical Imaging Systems 3 s.h.

Introduction to the Physics, Instrumentation, Image Processing Methods used in common medical imaging modalities. Systems covered include X-Ray, CT, Ultrasound, MRI, nuclear medicine, and fluorescence. Primary foci will be system construction as well as image reconstruction and processing. Students will engage in limited hands-on image acquisition and code-based processing.

Prereq.: PHYS 2611 or ECEN 3741. Prereq. or Coreq.: ECEN 3710.

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 Coreq.:** 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.

ECEN 6900 Seminar 1-3 s.h.

Designed to examine topics in the field. May be repeated once.

ECEN 6901 Control Systems 1 3 s.h.

Fundamental concepts in linear system theory. matrix algebra, linear vector spaces, linear operators. Input-output and state-space models for continuoustime systems; canonical forms. Solutions of state space equations. Characteristics of linear systems: stability; controllability and observability. State variable feedback; introduction to state estimation.

ECEN 6902 Control Systems 2 3 s.h.

State-variable feedback techniques: design of state estimators. Design using polynomial equations. Design of digital controllers: discrete equivalents and direct methods. Introduction to implementation of digital control systems. Prereq.: ECEN 6901.

ECEN 6903 Advanced Control Systems 3 s.h.

Introduction to nonlinear control systems: basic nonlinear phenomena, describing functions, Lyapunov stability, linearization techniques. Introduction to linear optimal guadratic control; stochastic modeling and Kalman filtering. Prereq.: ECEN 6902.

ECEN 6911 Electromagnetic Fields 1 3 s.h.

Solution of boundary value problems in general form. Laplace, Poisson, and diffusion and wave equations in orthogonal coordinate systems.

ECEN 6912 Electromagnetic Fields 2 3 s.h.

Solution of boundary value problems in general form. Laplace, Poisson, and diffusion and wave equations in orthogonal coordinate systems.

ECEN 6933 Digital Systems: VHDL Design 3 s.h.

Local minimization, design of combinational networks; design of synchronous and asynchronous sequential machines; design of digital systems using VHD, modeling combinational and sequential networks, compilation, simulation, and synthesis of VHDL codes.

ECEN 6934 Digital Systems: Computer Arithmetic 3 s.h.

Number system representations: standard and unconventional formats. Design of two-operand and multi-operand fast adders. High-speed multiplication and division algorithms. Floating-point numbers, algorithms, and error control. Hardware algorithms for function evaluation. Prereq.: ECEN 6933.

ECEN 6981 Electric Power System Engineering 3 s.h.

The formulation of equations to study electric power network problems, including feeders, power flow, short circuits, protection systems, and stability. The study of power system over voltages and transients caused by short circuits, switching, and lightning. The application of numerical techniques to study and design special projects using digital computations.

ECEN 6983 Modern Power Sources 3 s.h.

Analytical and descriptive study of modern power plants. Combustion and environmental problems with fossil-fueled power plants. Electromagnetic circuits and devices with emphasis on the principles of electromechanical energy conversions.

Cross-Listed: CHEN 6983 and MECH 6983.

ECEN 6985 Electromechanical Motion Devices 3 s.h.

Thermodynamics of batteries, and of electric and fuel cells. Power from nuclear isotopes. Features common to rotating electromagnetic fields. Analysis and design of electromechanical power components. Logic circuit design with I/O structure and interface.

Cross-Listed: CHEN 6985 and MECH 6985.

ECEN 6986 Power Electronics Circuits and Devices 3 s.h.

The design and analysis of power electronic circuits using solid-state switching devices. Topics include power semiconductor diodes and transistors, diode circuits and controlled rectifiers, thyristors, communication techniques, AC voltage controllers, and switching regulators, with applications.

ECEN 6987 Power Electronics and Industrial Drives 3 s.h.

The design and analysis of power electronic circuits and systems, static switches, power supplies, AC and DC drives, and protection of power electronic devices and circuits.

ECEN 6988 Nano- and Micro-Electro Mechanical Systems 3 s.h.

NEMS and MEMS fabrications, elastic system structure, membranes and plates, magnetically actuated systems, continuum theory and scaling laws. Microfluidics and nanofluidics devices. Prereq .: Graduate standing

ECEN 6990 Thesis 1-6 s.h.

Admission Requirements DEGREE PROGRAMS

Applicants must meet all of the general requirements for admission to the College of Graduate Studies. Admission to the program is selective and based on the qualifications of the applicant, the needs of the program, and the availability of funding. Applicants with lesser qualifications may be granted provisional graduate student status based on evaluation of their undergraduate records, standardized test (e.g. GRE) results, work experience, and other professional qualifications. A graduate assistantship is offered to highly qualified applicants based on the needs of the program and the availability of funding.

Master of Science in Engineering in Industrial and Systems Engineering

Graduate Program Coordinator

Dr. Seokgi Lee

Assistant Professor and Program Director

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Moser Hall 2465

Program Description

The industrial engineering program option provides opportunities for interdisciplinary graduate studies toward the Master of Science in Engineering with specialization in engineering management or industrial/manufacturing systems engineering. Students can also pursue study focused on specialized areas of industrial and systems engineering, such as operations research.

All study plans are interdisciplinary and include some coursework from outside the department. They are designed to serve practicing engineers, as well as those students who want to pursue advanced graduate studies beyond the Master of Science in engineering. The ISE program offers five different plans: (1) Thesis, (2) Non-Thesis,(3) Management, (4) Internship or Industry Project, and the (5) Accelerated 4+1 plan.

Admission Requirements DEGREE PROGRAMS

Applicants must meet all of the general requirements for admission to the College of Graduate Studies. Admission to the program is selective and based on the academic and professional qualifications of the applicant. Applicants with lesser qualifications may be granted provisional graduate student status based on evaluation of their undergraduate records, GRE results (if taken), work experience, and other professional qualifications.

Graduate assistantships are offered to highly qualified applicants based on the needs of the program and the availability of funding.

The Master of Science in Engineering (MSE) may be characterized as being both career-oriented and flexible. Five different program plans are available to accommodate the needs of nearly every engineering graduate student. Graduate students enrolled in any of the Industrial & Systems Engineering (ISE) graduate programs must complete:

- · 30 semester hours for the thesis plan,
- · 33 semester hours for the non-thesis plan,
- · 33 semester hours for the management plan,
- 30 semester hours for the internship/industry project plan, or
- 30 semester hours for the accelerated 4+1 MSE plan*.

*The accelerated 4+1 MSE plan is only available to students already in the YSU Industrial & Systems Engineering undergraduate program.

The degree requirements consist of core courses, technical courses, graduate internships, and thesis or project courses. The management plan requires a series of business (or other ISE) courses. The internship plan requires 6-9 semester hours of graduate-level internship courses. The internship must be in the Industrial and Systems discipline and comparable to graduate course work. The internship must be approved by the graduate program coordinator.

These degree programs are designed to provide graduate students with the knowledge and skills to excel in professional careers and/or pursue a PhD or doctorate degree in Industrial & Systems Engineering. To obtain a list of core and technical courses required in the ISE graduate program, students should contact the Graduate Program Director.

Program Plans Thesis Plan

Graduate students choosing the thesis plan are required to complete 30 semester hours of graduate coursework. This generally consists of:

- · 6-9 semester hours of core courses,
- · 15-18 semester hours of technical concentration courses, and
- · 6 semester hours of thesis.

This plan is strongly recommended for all candidates who wish to continue their graduate studies beyond the master's degree. The thesis provides firsthand research experience with experimental design, literature searches, research methodology, technical report writing, and oral presentation of results. Additionally, the thesis option can lead the graduate student to a higher level of expertise in the chosen area of specialization. Students enrolled in this plan are required to have a thesis proposal approved by the faculty <u>advisor</u> and the Graduate Program Director before the end of their second semester into the <u>ISE</u> graduate program.

Non-thesis Plan

The non-thesis plan is designed for students who wish to enhance their knowledge and skills to succeed in careers as practicing engineers, but are unlikely to pursue a PhD or doctoral degree. A total of 33 semester hours of coursework is required for this plan. In addition to 6-9 semester hours of core courses, every student enrolled in this option is required to complete 21-24 semester hours of technical courses related to their discipline, and a 3-semester-hour graduate project course. A graduate student enrolled in a graduate project course will be required to defend the results of his or her project by giving a presentation to the engineering faculty and students.

Management Plan

Students who have been in the work arena and are moving into an engineering management role may wish to choose the management plan. A total of 33 semester hours of coursework is required for this plan. This consists of:

- · 6-9 semester hours of core courses,
- · 9-12 semester hours of business (or approved ISE) courses,
- 12-18 semester hours of technical courses, and
- · a 3-semester-hour graduate project.

Students enrolled in this plan is required to have a project proposal approved by the faculty <u>advisor</u> and the ISE Graduate Program Director before the end of their second semester in the program. A graduate student enrolled in a graduate project course will be required to defend the results of his or her project by giving a presentation to the engineering faculty and students. <u>Students with the Management Plan should consult the Graduate Program</u> <u>Director and the faculty advisor to develop their course plan.</u>

INTERNSHIP/industry project PLAN

This option is suitable for students who would like to gain practical experience in the industry before graduating with a master's degree. A total of 30 semester hours of coursework is required for this plan. The internship plan consists of:

- 6-9 semester hours of core courses,
- · 12-15 semester hours of technical courses, and
- · 6-9 semester hours of graduate-level internship courses.

<u>Students enrolled in this plan are required to have an internship/industry</u> <u>project proposal approved by</u> the Graduate Program <u>Director before the end of</u> their second semester into the program.

The graduate internship/industry project must be approved by the ISE Graduate Program Director on a case by case basis for graduate course credit. The internship shall be in the industrial and systems discipline and be comparable to a graduate course work. A graduate internship or industry project will require at least 400 hours of work for 3 semester hours of graduate credit, 300 hours of work for 2 semester hours of graduate credit, and 200 hours of work for 1 semester hour of graduate credit.

Internship students are strongly encouraged to consult with the STEM Professional Practices Office to seek internship opportunities.

Accelerated 4+1 MSE PLAN

Undergraduate students already in the YSU Industrial & Systems Engineering undergraduate program can apply for admission into the accelerated 4+1 MSE in Industrial and Systems Engineering graduate program after completing 78 semester hours with a GPA of 3.3 or higher. After being admitted into the accelerated 4+1 MSE program, students will be allowed a maximum of nine semester hours of graduate coursework to be double-counted towards both bachelor's and master's degrees upon approval by the Graduate Program Director. An additional three hours of graduate coursework can be completed as an undergraduate and used exclusively for graduate credit.

Industrial and Systems Engineering Requirements

At the time of initial enrollment, the student will select a program plan (thesis, non-thesis, management, or internship/project) and technical concentration area (engineering management, industrial/manufacturing systems engineering, operations research, etc.) The general requirements for each plan are listed above under Program Plans. Lists of required courses and possible electives for each plan may be obtained from the graduate program option coordinator. Every graduate student is responsible for selecting an area of specialization by signing a special form designed for this purpose. A student may change his or her area of concentration or program of study in consultation with his or her advisor.

In cooperation with an assigned faculty advisor, each student will establish a set of academic goals and desired outcomes, and a coursework plan to meet those objectives. Courses taken without the permission of the advisor may not be used to meet the degree requirements.

Thesis students who have registered for all required thesis hours and have completed all course requirements but have not finished the thesis are required to maintain current student status if they expect to utilize any University service (e.g., parking, computers, library, advisors' assistance, thesis defense, etc.). This can normally be accomplished by registering for at least one hour of thesis credit in ISEN 6990 Special Topics.

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 Coreq.: ISEN 3723.

ISEN 5812L Manufacturing Practices 2 Laboratory 1 s.h.

Experimental analysis of advanced manufacturing techniques. Advanced sensing and controlling technologies. Real-time monitoring, metrology, and data acquisition. Numerically controlled (NC) machines and programming. Netshape and additive manufacturing. Prereg. or Coreg.: 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 2624.

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 queuing models and the specialization of linear models to equipment replacement, project planning, assignment, and transshipment problems. Prereg.: 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.

ISEN 6901 Optimization Techniques 3 s.h.

A study of the theory of optimization and its application to problems from several engineering disciplines. The principles will be applied to constrained and unconstrained engineering problems. Algorithms will be developed for solving optimization problems, which can be formulated as linear, nonlinear, integer, or dynamic programming models.

ISEN 6902 Digital Simulation 3 s.h.

A study of simulation methods using digital computers, random number generation, Monte Carlo techniques, gueuing models, and analysis of simulation output. The student will be provided the opportunity to simulate moderately complex systems on digital computers. Primary emphasis will be on models of technical, scientific, and economic systems.

ISEN 6905 Applied Statistics for Design, Quality, and Productivity 3 s.h. Review of probability and statistics, uncertainty and decision making, statistical inference, and analyzing sources of variation. Risk and reliability, risk assessment, robust and guality design, regression analysis, and analysis of variance. Design of experiments, single-factor and multifactor experiments, design of experiments for product characteristics, process characteristics, and process optimization. General statistical process control, special charts and sampling techniques for control, monitoring, and auditing quality. Economic issues in process/quality control.

Prereq.: ISEN 3710 Engineering Statistics or equivalent.

ISEN 6906 Supply Chain Engineering 3 s.h.

In an expanding global economy, efficient and responsive supply chains are critical to business success. This course explores key aspects of supply chain engineering with an emphasis on mathematical approaches to supply chain analysis. Topics include demand forecasting, inventory modeling and control, facility location, capacity planning, transportation, warehousing, scheduling, material requirements planning and procurement.

Prereq.: ISEN 3710/ISEN 6921 and consent of instructor.

ISEN 6908 Logistics Engineering and Mgt 3 s.h.

Study of logistics from a systems engineering perspective. Covers design of systems for supportability and serviceability, the production and effective distribution of systems for customer use, and the sustaining maintenance and support of systems throughout their period of utilization.

Prereq.: ISEN 3720, ISEN 5801 or consent of the instructor.

ISEN 6910 Design and Analysis Experiment 3 s.h.

For professionals from business and industry, and students. Specific topics will be announced each time the workshop is offered. Credit hours based on frequency and duration of workshop meetings.

ISEN 6912 Network Flows 3 s.h.

Flow problems on networks. Maximum flow minimum cut theorem. Labeling algorithms. Circulation and feasibility theorems. Sensitivity analysis. Incidence matrices. Shortest routes. Minimum cost flows, out-of-kilter algorithm. Critical path networks, project cost curves. Multi-commodity flow problem, billows. Matching problems in graph theory. Prereq.: ISEN 5801 or MATH 3720.

ISEN 6920 Project Management 3 s.h.

Methods for planning, organizing, scheduling, supporting, and controlling projects. Network techniques, including CPM, PERT, and time-cost trade-off analysis. Techniques for the estimation of time, manpower, and other resource requirements of the projects, including economic and statistical analysis, forecasting, learning curves, and line balancing. Management of time and other resources involved. Case studies and utilization of computer resources for the analysis and presentation of projects. Prereq.: graduate standing in STEM college.

ISEN 6921 Engineering Statistics 3 s.h.

Development and application of stochastic models of engineering systems. Elementary probability models applied to decision making under uncertainty. Development and use of theoretical probability distributions for describing stochastic systems. Models for point and confidence interval estimation and models for correlation analysis applied to engineering problems. Prereq .: ISEN 3710 or equivalent.

ISEN 6930 Microcomputer Models for Deterministic Engineering Systems 3 s.h.

Microcomputer model development, implementation, evaluation, and application for deterministic engineering systems. Recognition of engineering systems amenable to analysis as deterministic microcomputer models. Determination of model structure, identification of model parameters, verification of model validity, exercising the model, and interpretation of results

ISEN 6935 Decision Analysis for Engineering 3 s.h.

Review of probability and statistics, subjective probability, probability models, using data, Monte Carlo simulation, and value of information. Introduction to decision analysis, elements of decision problems, structuring decisions, making choices, creativity, and decision making. Risk attitudes, utility axioms, paradoxes, and conflicting objectives.

Prereq.: ISEN 3710 Engineering Statistics or equivalent, or permission of instructor.

ISEN 6939 Operations & Supply Chain Strategy 3 s.h.

This course explores manufacturing and service processes for transforming resources into technology-based products. It will cover strategies and processes for moving information and materials through the supply chain, strategies to support overall firm objectives, product development programs and capacity utilization requirements. The course will also explore manufacturing for flow design and facility layout; six sigma guality and statistical process control, lean supply chains, logistics, distribution and global sourcing; ERP', and inventory management.

Prereq.: ISEN 3710 or equivalent.

ISEN 6970 Advanced Manufacturing Processes 1 3 s.h.

Advanced manufacturing processes for metallic materials. Included are continuous casting, powder techniques, fluidized bed reactors, and directional solidification.

ISEN 6971 Advanced Manufacturing Processes 2 3 s.h.

Advanced manufacturing processes for nonmetallic materials. Included are sintering, slip casting, plastic forming techniques, and extrusion of nonplastic materials

ISEN 6990 Special Topics 3 s.h.

Special topics in industrial/manufacturing systems engineering covering areas not otherwise available. Topics are selected by the faculty from fields of current research interest or special emphasis and may vary from semester to semester. May be repeated for a maximum of six semester hours.

ISEN 6992 Graduate Projects 3 s.h.

Analysis, design, research, or other independent investigation on projects selected with the advice and approval of the student's graduate committee. Prereq.: Permission of instructor.

ISEN 6999 Thesis 1-6 s.h. Hours arranged. May be repeated.

Learning Outcomes

The student outcomes of the master's degree in ISE are:

1. Student will be able to use and apply discipline knowledge effectively and provide leadership (interpret, analyze and implement solutions to problems/ challenges) within an organization.

2. Student will be able to form, facilitate, lead, coordinate and participate in teams.

3. Student will be able to understand organizational processes and behaviors.

4. Student will have a graduate level knowledge of methodological and computational skills with which able to apply effectively.

5. Student will have a graduate level proficiency in collecting, analyzing, and interpreting data

6. Student will have graduate level proficiency in approaching unstructured problems and synthesizing and designing solutions for this problem.

7. Student will have a graduate level proficiency in evaluating the impact of these solutions in the broader context of the organization and society.

8. Student will have a graduate level proficiency in effectively presenting and communicating solutions in the form of written, oral and electronic media.

9. Student will be able to develop skills to support life-long learning within the field of profession of ISE.

Master of Science in Engineering in **Mechanical Engineering**

Graduate Program Director

C. Virail Solomon 2505 Moser Hall (330) 941-1730 vcsolomon@ysu.edu

PROGRAM Description

The mechanical engineering graduate program offers the Master of Science in Engineering with specialization within the general mechanical engineering disciplines. Specializations are available in the areas of mechanical analysis/ design, numerical modeling, thermo-fluids systems, advanced materials and manufacturing. The thesis and non-thesis plans are for students who seek to deepen their theoretical knowledge and strengthen their ability to solve more advanced engineering problems, while the management plan is for those who wish to include managerial training in their program of preparation.

The Rayen School of Engineering has excellent computer and laboratory facilities that provide for the following design and research capabilities: solid modeling, FEA in stress analysis, structural dynamics and heat transfer, experimental stress analysis, vibrations and noise control, computational and experimental heat transfer and fluid dynamics, advanced machine design, advanced materials and manufacturing.

Admission Requirements DEGREE PROGRAMS

Applicants must meet all of the general requirements for admission to the College of Graduate Studies. Admission to the program is selective and based on the academic and professional qualifications of the applicant. Applicants with lesser qualifications may be granted provisional graduate student status based on evaluation of their undergraduate records, standardized test (e.g. GRE) results, work experience, and other professional qualifications. Graduate assistantship is offered to highly qualified applicants based on the needs of the program and the availability of funding.

The Master of Science in Engineering (MSE) may be characterized as being both career-oriented and flexible. Five different plans are available to accommodate the needs of nearly every engineering graduate student. Graduate students enrolled in the Mechanical Engineering (ME) graduate program must complete:

- · 30 semester hours for the thesis plan,
- · 33 semester hours for the non-thesis plan,
- · 33 semester hours for the management plan,
- · 30 semester hours for the internship plan, or
- 30 semester hours for the accelerated 4+1 MSE plan*.

*The accelerated 4+1 MSE plan is only available to students already in the YSU Mechanical Engineering undergraduate program.

The degree requirements consist of core courses, technical courses, graduate internships, and project courses. The management plan requires a series of business courses. The internship plan requires 6-9 semester hours of graduate level internship courses. The internship must be in the Mechanical Engineering discipline and comparable to a graduate course work.

These degree programs are designed to provide graduate students with the knowledge and skills to excel in professional careers and/or pursue a PhD or doctorate degree in Mechanical Engineering. To obtain a list of core and technical course required in the Mechanical Engineering graduate program, students should contact the Graduate Program Director.

Program Plans

Thesis Plan

Graduate students choosing the thesis plan are required to complete 30 semester hours of graduate coursework. This generally consists of:

- · 6-9 semester hours of core courses,
- · 15-18 semester hours of technical concentration courses, and
- · 6 semester hours of thesis.

This plan is strongly recommended for all candidates who wish to continue their graduate studies beyond the master's degree. The thesis provides firsthand research experience with experimental design, literature searches, research methodology, technical report writing, and oral presentation of research results. Additionally, the thesis option can lead the graduate student to a higher level of expertise in the chosen area of specialization.

Non-thesis Plan

The non-thesis plan is designed for students who wish to enhance their knowledge and skills to succeed in careers as practicing engineers, but are unlikely to pursue a PhD or a doctoral degree. A total of 33 semester hours of coursework is required for this plan. In addition to 6-9 semester hours of core courses, every student enrolled in this option is required to complete 21-24 semester hours of technical courses related to their discipline, and a 3-semester hours graduate project course. A graduate student enrolled in a graduate project course will be required to defend the results of his or her project by giving a presentation to the engineering faculty and students.

Management Plan

Students who have been in the work arena and are moving into an engineering management role may wish to choose the management plan. A total of 33 semester hours of coursework is required for this plan. This consists of:

- · 6-9 semester hours of core courses,
- 9-12 semester hours of business courses,
- 12-18 semester hours of technical courses, and
- · a 3-semester-hour graduate project.

Students enrolled in this plan are required to have a project proposal approved by the faculty <u>advisor</u> and the Graduate Program Director before the end of their second semester into the graduate program. A graduate student enrolled in a graduate project course will be required to defend the results of his or her project by giving a presentation to the engineering faculty and students. Students with the Management Plan should consult the Graduate Program Director and the faculty advisor to develop their course plan.

Internship PLAN

<u>This option is suitable for students who would like to gain practical experience</u> in the industry before graduating with a master's degree. <u>A total of 30</u> <u>semester hours of coursework is required for this plan.</u> The internship plan consists of:

- · 6-9 semester hours of core courses,
- · 12-15 semester hours of technical courses, and
- · 6-9 semester hours graduate-level internship courses.

Students enrolled in this plan are required to have an internship proposal approved by the Graduate Program Director before the end of their second semester into the program. The graduate internship must be approved by the Mechanical Engineering Graduate Program Director on a case by case basis for graduate course credit. The internship shall be in the mechanical engineering discipline and be comparable to a graduate course work. Graduate internship will require at least 300 hours of work for 3 semester hours of graduate credit, 200 hours of work for 2 semester hours of graduate credit, and 100 hours of work for 1 semester hour of graduate credit. Internship students are strongly encouraged to consult with the STEM Professional Practices Office to seek internship opportunities.

Accelerated 4+1 MSE PLAN

Undergraduate students already in the YSU Mechanical Engineering undergraduate program can apply for admission into the accelerated 4+1 MSE in Mechanical Engineering graduate program after completing 78 semester hours with a GPA of 3.3 or higher. After being admitted into the accelerated 4+1 MSE program, students will be allowed a maximum of nine semester hours of graduate coursework to be double-counted towards both bachelor's and master's degrees upon approval by the Graduate Program Director.

Mechanical Engineering Requirements

At the time of initial enrollment, the student will select a program plan (thesis, non-thesis, management, or internship) and technical concentration area (mechanical analysis/design of rigid and deformable bodies, analysis/ design of thermal-fluid systems, etc.) available through faculty expertise and consultation. The general requirements for each plan are listed above under Program Plans. Lists of required courses and possible electives for each plan are shown below.

In cooperation with an assigned faculty adviser and the Graduate Program Director, each student will establish a set of academic goals and desired outcomes, and a coursework plan to meet those objectives. Graduate students must meet the Graduate Program Director each semester before registering for courses. Upon completion of the graduate program, all students will complete either a written or an oral assessment of the effectiveness of the program in meeting their established goals and outcomes.

Thesis students who have registered for all required thesis hours and have completed all course requirements but have not finished the thesis are required to maintain current student status if they expect to utilize any University service (e.g. parking, computers, library, advisors' assistance, thesis defense, etc.). This can normally be accomplished by registering for at least one hour of thesis credit.

COURSE	TITLE	S.H.
Core courses		
MATH 6910	Advanced Engineering Mathematics 1	3
MATH 6911	Advanced Engineering Mathematics 2	3
Technical Concen	traiton Coursese	
MECH 6900	Special Topics	2-4
MECH 6900I	ST Engineering Tribology	2-4
MECH 5852	Stress and Strain Analysis 2	3
MECH 5836	Fluid Power and Control	3
MECH 5825	Heat Transfer 2	3
MECH 5842	Kinetics of Machines	3
MECH 5884	Finite Element Analysis	3
MECH 5885	Computational Fluid Dynamics	4
MECH 6904	Advanced Thermodynamics	3
MECH 6915	Failure Analysis	3
MECH 6925	Computational Heat Transfer	3
MECH 6930	Advanced Fluid Mechanics and Heat Transfer	3
MECH 6945	Advanced Dynamics	3
MECH 5892	Control of Mechanical Systems	3
Choose one		
MECH 6990	Thesis	2-6
MECH 6992	Graduate Projects	3
STEM 5890	STEM Graduate Internships	1-3

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.

Theory of prime movers, turbomachinery, and control systems. Modeling of hydraulic and pneumatic systems and components. Hydraulic fluids, pumps, cylinders, valves, motors, compressors, and actuators. Hydraulic and pneumatic circuit applications and control. **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.

MECH 6900 Special Topics 2-4 s.h.

Special topics and new developments in mechanical engineering. Subject matter and credit hours to be announced in advance of each offering. May be taken three times.

Prereq.: As announced or permission of instructor.

MECH 6904 Advanced Thermodynamics 3 s.h.

Laws of equilibrium thermodynamics; relations between properties and aspects of the Second Law. Exergy analysis. Macroscopic and microscopic considerations for the prediction of properties. Microscopic description based on classical and quantum statistics. General stability criteria, statistical equilibrium, and trend toward equilibrium fluctuations. **Prereq.**: Permission of graduate advisor.

MECH 6915 Failure Analysis 3 s.h.

Advanced methods in failure analysis of metallics, ceramics, polymers, and composites. Numerous practical examples will be discussed. Individual student projects using scanning electron microscopy are required. Three hours lecture and three hours laboratory.

MECH 6925 Computational Heat Transfer 3 s.h.

Numerical modeling techniques and methods in heat transfer. Computational analysis of conduction and convection by the finite element method, finite difference method, and the method of coordinate transformation. **Prereq.:** MATH 3705 Differential Equations and MECH 3725 Heat Transfer I, or permission of instructor.

MECH 6930 Advanced Fluid Mechanics and Heat Transfer 3 s.h.

Viscous and inviscid flows, Navier-Stokes equations, Euler equations, and complex variables methods. Analytic solutions to advanced heat transfer problems, advanced boundary-value problems.

Prereq.: MECH 3725 Heat Transfer I or equivalent.

MECH 6945 Advanced Dynamics 3 s.h.

Three-dimensional vector statics; kinematics and kinetics of particles and rigid bodies; energy, momentum, and stability. LaGrange's equations of motion for particles and rigid bodies impulse; small oscillations; nonholonomic and dissipative systems.

Prereq.: Permission of graduate advisor.

MECH 6952 Applied Elasticity 3 s.h.

Equations or equilibrium, compatibility and boundary conditions-their applications to plane stress and plane strain problems. Stress functions, strain energy methods, stress distribution in anile symmetrical bodies; special problems in structures involving torsion and bending of prismatical bars. **Prereq.:** MECH 3751 Stress and Strain Analysis I or equivalent, or permission of graduate advisor.

MECH 6962 Mechanical Design Analysis 3 s.h.

The study of analytical aspects and the application of engineering science topics to machine elements and machinery. Some case studies in mechanical design.

Prereq.: Permission of graduate advisor.

MECH 6963 Advanced Stress Analysis 3 s.h.

Theory and engineering applications of the most recent techniques of experimental stress analysis, brittle coatings, photoelasticity, strain gauges, photostress.

Prereq.: MECH 3751 Stress and Strain Analysis I or equivalent or permission of graduate advisor.

MECH 6983 Modern Power Sources 3 s.h.

Analytical and descriptive study of modern power plants. Combustion and environmental problems with fossil-fueled power plants. Electromagnetic circuits and devices with emphasis on the principles of electromechanical energy conversions.

Prereq.: Permission of graduate advisor. Cross-Listed:as CHEN 6983 and ECEN 6983.

MECH 6985 Electromechanical Motion Devices 3 s.h.

Thermodynamics of batteries, and electric and fuel cells. Power from nuclear isotopes. Features common to rotating electromagnetic fields. Analysis and design of electromechanical power components. Logical circuit design with I/ O structure and interface.

Cross-Listed:as CHEN 6985 and ECEN 6985.

MECH 6990 Thesis 2-6 s.h.

MECH 6992 Graduate Projects 3 s.h.

Analysis, design, research, or other independent investigation on projects selected with the advice and approval of the student's graduate committee.

- 1. Demonstrate subject mastery and competence in the area of mechanical engineering specialization in order to practice as an influential mechanical engineer.
- 2. Demonstrate the ability to use common theoretical, experimental, and computational techniques in mechanical engineering.
- Demonstrate the ability to use effectively oral and written communication to convey engineering concepts to a broad audience and to successfully practice engineering in a multi-disciplinary team.
- 4. Demonstrate an understanding of the need for, and ability to engage in life-long learning by participation in professional societies, professional registration, publications, technical and scientific presentations at professional meetings, enrollment in a doctoral program, etc.
- Demonstrate an understanding the impact of engineering solutions in a global, environmental, social, and economic context. Understand the importance of sustainability in contemporary global context.

- Demonstrate the ability to conduct independent research relevant to solve in an original and effective manner the problem(s) at hand.
- 7. Demonstrate an understanding of professionally and ethically responsible practices in mechanical engineering.

Master of Science in Nursing Clinical Options

- · Adult-Gerontology Acute Care Nurse Practitioner
- Family Nurse Practitioner (FNP)
- Nursing Education

Post-master's Certificates

- Adult-Gerontology Acute Care Nurse Practitioner
- Family Nurse Practitioner (FNP)
- Nursing Education

MSN Program Director

Wendy M. Thomas, DNP, CNS, FNP 3313 Cushwa Hall (330) 941-2638 wmthomas@ysu.edu

Program Description

The Master of Science in Nursing program is designed for baccalaureateprepared nurses who have strong undergraduate foundations in critical thinking, decision-making, and nursing practice. The program consists of three program options, with specialization in Adult- Gerontology Acute Care Nurse Practitioner, Family Nurse Practitioner and Nursing Education, and three post-master's certificates in Adult- Gerontology Acute Care Nurse Practitioner, Family Nurse Practitioner and Nurse Education. The Centofanti School of Nursing also offers a non-degree School Nurse certificate.

The core curriculum centers on professional nursing issues, nursing science, and research methods for building nursing knowledge. The Family Nurse Practitioner option focuses on the delivery of primary care to families and persons of all ages within the health care delivery system. The Adult-Gerontology Acute Care Nurse Practitioner option focuses on providing direct acute care to adult and older adult individuals and families. The Nursing Education option focuses on delivery of nursing and patient education to individuals in academic, health-care delivery and community settings. The non-degree School Nurse certificate focuses on delivery of comprehensive care to individuals in the school environment.

The Master of Science in Nursing program is fully accredited by the Commission on Collegiate Nursing Education (CCNE). For additional information regarding accreditation, contact CCNE:

Commission on Collegiate Nursing Education

655 K Street, NW, Suite 750 Washington, DC 20001

Phone: (202) 887-6791

http://www.aacnnursing.org/CCNE

Graduate Faculty

Professor

Sheila M. Blank, D.N.P., Associate Professor, Director

Lori Ann Fusco, D.N.P., Associate Professor

Patricia L. Hoyson, Ph.D., Professor

Cynthia M. Shields, D.N.P., Professor

Mary P. Shortreed, D.N.P., Associate Professor

Debra Wallace, Ph.D., Assistant Professor

Amy Weaver, Ph.D., Professor

Lecturer

Melody Wright, M.S.N., Lecturer

Graduate Courses

NURS 6900 Healthcare Issues and Trends 3 s.h.

Exploration of nursing issues including changing roles and scope of practice and discipline concerns, with emphasis of interdisciplinary collaboration and social, cultural, political, economic, legal, regulatory, and ethical practice considerations.

Prereq.: Graduate nursing program status.

NURS 6901 Theoretical Foundations in Science and Research 3 s.h.

Analysis of health-related evidence to continuously improve quality of practice. Exploration of the significance of theory, research and research methods and strategies for translating evidence into practice. Research design, instrumentation, data collection methods, statistical analysis, data analysis and data interpretation will be discussed.

Prereq.: Nursing graduate status.

NURS 6902 Advanced Pathophysiology 3 s.h.

Normal physiologic functions and pathologic mechanisms are examined to prepare nurses for advanced practice roles.

NURS 6903 Advanced Pharmacology 3 s.h.

Application of pharmacological concepts in clinical settings with examination of major categories of pharmacological agents. **Prereq.:** NURS 6902.

NURS 6904 Advanced Health Assessment 3 s.h.

Development of advanced clinical knowledge and skills needed for comprehensive health assessment across the life span. Emphasis on health history, physical, cultural, developmental and nutritional assessments with differential diagnosis of common health problems.

Prereq.: NURS 6902 (or concurrent).

NURS 6907 Health Assessment of School Children 3 s.h.

Development of advanced clinical knowledge and skills in assessment of school children. Emphasis on research from nursing, biological, behavioral, and social sciences.

Prereq.: enrollment in school nurse licensure program.

NURS 6917 Differential Diagnosis 3 s.h.

Developing diagnostic reasoning skill through comprehensive analysis of present and past histories, physical findings, and diagnostic studies that contribute to differential diagnoses of major health problems across the lifespan. The client is assessed from a holistic advanced practice perspective with consideration of individual culture, social, family, and community environments.

Prereq.: NURS 6902.

NURS 6918 Advanced Diagnostics and Technologies 3 s.h.

Theory and technical skills essential to the advanced practice environment. Focuses on select technologies, informatics, telehealth, common procedures, and diagnostic tests encountered by advanced practice nurses in the clinical/ practice setting.

NURS 6920 Special Topics 1-4 s.h.

Topics may vary from semester to semester and will be announced along with prerquisites and hours. May be repeated. S/U grading.

NURS 7003 Role Development in Advanced Practice 3 s.h.

The examination of concepts, theories, and research related to advanced practice role. Explores the history and overview of the role of the advanced practice nurse as provider, consultant, educator, researcher, and leader in practice. Examines select legal, practice, and ethical issues in advanced practice.

NURS 7004 Role Development Practicum 2 s.h.

Application of concepts, theories, and research through practicum hours in a variety of settings.

Prereq.: NURS 7029 or NURS 7042.

NURS 7005 Capstone Practicum 3 s.h.

Culminating course of the MSN program. Synthesis of learned concepts and theories in the form of an individual scholarly project and dissemination of findings under the direction of a graduate faculty member.

Prereq.: Completion of all graduate nursing coursework and approval of the MSN faculty committee.

NURS 7006 Special Topics in Nursing 1-5 s.h.

Special interest nursing topics selected by the faculty which reflect current trends and issues in nursing practice. May be repeated as desired.

NURS 7012 Anesthesia Principles 4 6 s.h.

Administration of anesthesia for high-risk patients. **Prereq.:** NURS 7011.

NURS 7014 Health Management in Schools 3 s.h.

Advanced nursing management of health care needs of children in schools, pre-K through high school.

Prereq.: NURS 6907 or enrollment in school nurse licensure program.

NURS 7016 School Nurse Role 3 s.h.

Examination of concepts, theories, and research related to advanced practice role development, teaching, learning, technology, evaluation strategies, leadership, marketing skills, and health care delivery in school settings. **Prereq.:** NURS 7014 or enrollment in the school nurse licensure program.

NURS 7017 School Nurse Role Practicum 1-5 s.h.

Application of concepts, theories, and research from school nurse courses in a variety of settings.

NURS 7018 Nursing Curriculum Design 3 s.h.

Focus on nursing curriculum development, design, and implementation. Foundations of nursing curriculum, curriculum designs, and development of frameworks and learning strategies to achieve outcomes, and competencies in nursing education.

NURS 7019 Nursing Instructional Methods 3 s.h.

Theoretical foundations and analysis of teaching strategies in academic and clinical settings promoting critical thinking, clinical judgment, assessment techniques, and learning outcomes in a variety of nursing education and healthcare settings.

NURS 7020 Evaluation in Nursing Education 3 s.h.

Methods, frameworks, basic principles, and strategies for nursing educational evaluation, including assessment, designs, curriculum and program evaluation tools, agency accreditation processes, and measurement tools of scoring and grading.

NURS 7021 Nurse Educator Role 3 s.h.

Examination of concepts, theories and research related to the nurse educator advanced practice role development including teaching, learning, technology, evaluation strategies, leadership, marketing skills, and nursing education practice in academic and health care delivery settings.

NURS 7022 Nurse Educator Practicum 1 1 s.h.

Supervised clinical practicum consisting of 50 hours in a variety of education and health care settings. Field experience and application of concepts, theories, research findings, teaching strategies, learning, technology, evaluation strategies, leadership, and skills from prior Nursing Education courses will be utilized.

Prereq.: NURS 7018, NURS 7019, NURS 7020 and NURS 7021.

NURS 7023 Nurse Educator Practicum 2 2 s.h.

Supervised clinical practicum consisting of 100 hours in a variety of education and health care settings, with a focus on nursing education. Field experience and application of concepts, theories, research findings, teaching strategies, learning, technology, evaluation strategies, leadership, and skills from prior Nursing Education courses will be utilized.

Prereq.: NURS 7018, NURS 7019, NURS 7020, NURS 7021.

NURS 7037 Adult Gerontology Acute Care 1 3 s.h.

Competencies (knowledge, skills, and professional behaviors) required to provide comprehensive and holistic care to a culturally diverse, acutely ill population (young adult-frail elderly) is emphasized. Clinical manifestations of and patient response to particular patient care problems (e.g. pulmonary, cardiovascular, etc.) with emphasis on physical assessment findings for determining a differential diagnosis and planning of patient care needs, health promotion and health maintenance.

Prereq.: NURS 6902, NURS 6903, NURS 6904.

NURS 7038 Adult Gerontology Acute Care 1 Practicum 3 s.h.

Supervised clinical practicum in an acute care facility. Emphasis is placed on the APRN-patient/family relationship collaborating with the health care team and health information technology.

Prereq.: NURS 7037, NURS 7039, NURS 7041.

NURS 7039 Adult Gerontology Acute Care 2 3 s.h.

Competencies (knowledge, advanced skills, and professional behaviors) required to provide comprehensive and holistic care to a culturally diverse, acutely ill adult population (young adult - frail elderly) is emphasized. Clinical manifestations of and patient response to particular patient care problems (e.g. integumentary, infectious disease) with emphasis on physical assessment findings for determining differential diagnosis and planning of patient care needs, health promotion and health maintenance. Prereq.: NURS 6902, NURS 6903, NURS 6904.

NURS 7040 Adult Gerontology Acute Care 2 Practicum 3 s.h.

Practicum in an acute care facility aligned with NURS 7039. Emphasis is placed on quality improvement and patient safety initiatives, interdisciplinary professional collaboration and functioning within the health system. Prereq.: NURS 7037, NURS 7039, NURS 7041.

NURS 7041 Adult Gerontology Acute Care 3 3 s.h.

Focus on the integration of the role components delivered by the adultgerontology nurse practitioner. Clinical manifestations of and patient response to particular patient care problems (i.e., endocrine, gastrointestinal, multisystem, trauma) with emphasis on physical assessment findings for determining a differential diagnosis and panning of patient care needs, health promotion and health maintenance. Emphasis on utilizing diagnostic reasoning, therapeutic interventions, pharmacological therapeutics, interdisciplinary treatment plans, consultation, referral, transitional care and research findings in the management and evaluation of culturally diverse acutely ill adult-gerontology patients.

Prereq.: NURS 6902, NURS 6903, NURS 6904.

NURS 7042 Adult Gerontology Acute Care 3 Practicum 3 s.h.

Practicum designed to integrate the independent practice competencies. Emphasis is on preventing illness, promoting health and an optimal functional level. Stabilizing the ill client and minimizing complications through an interdisciplinary approach and transitional care. Prereq.: NURS 7037, NURS 7039, NURS 7041.

NURS 7045 Family Nurse Practitioner 1 3 s.h.

Knowledge, skills, and professional behaviors required to provide comprehensive and holistic primary care to a culturally diverse population across the lifespan. Emphasis is on health promotion, health maintenance, and management of common health problems pertaining to children, adolescents, gynecological, reproductive, and family centered primary care with an emphasis on physical assessment findings for determining and planning of patient care needs.

Prereq.: NURS 6902, NURS 6903, NURS 6904.

NURS 7046 Family Nurse Practitioner 2 3 s.h.

Knowledge, advanced skills and professional behaviors required to provide comprehensive and holistic care to a culturally diverse population across the lifespan. Emphasis is on health promotion, illness prevention, disease detection, and identification and management of health problems. Focus is on clinical manifestations of and patient response to acute and chronic health problems (e.g. cardiovascular, pulmonary, endocrine, etc.) with emphasis on diagnosing and planning of patient care needs, health promotion and health maintenance.

Prereq.: NURS 6902, NURS 6903, NURS 6904.

NURS 7047 Family Nurse Practitioner 3 3 s.h.

Knowledge, advanced skills and professional behaviors required to provide comprehensive and holistic care to a culturally diverse population across the lifespan. Emphasis is on health promotion, illness prevention, disease detection, and identification and management of health problems. Focus is on clinical manifestations of and patient response to acute and chronic health problems (e.g. renal, gastrointestinal, integumentary, etc.) with emphasis on diagnosing and planning of patient care needs, health promotion and health maintenance.

Prereq.: NURS 6902, NURS 6903, NURS 6904.

NURS 7048 Family Nurse Practitioner 1 Practicum 3 s.h.

Supervised clinical practicum consisting of a recommended minimum of 150 hours in a variety of primary care settings. It is designed to provide the beginning Family Nurse Practitioner student with comprehensive experiences in health promotion and the identification and management of acute and chronic health problems in individuals across the lifespan. Prereq.: NURS 7045, NURS 7046, NURS 7047.

NURS 7049 Family Nurse Practitioner 2 Practicum 1-3 s.h.

Prereq.: NURS 7048.

NURS 7050 Family Nurse Practitioner 3 Practicum 1-3 s.h.

Supervised clinical practicum consisting of a recommended minimum of 150 hours in a variety of primary care settings. It is designed to provide the Family Nurse Practitioner student with comprehensive experiences in health promotion and the identification and management of acute and chronic health problems in individuals across the lifespan. Prereq.: NURS 7049.

NURS 7051 Family Nurse Practitioner 4 Practicum 1-3 s.h.

The final supervised clinical practicum consisting of a minimum of 75 hours and/or any remaining hours needed to meet the 600 total program hours in a variety of primary care settings. It is designed to provide the advanced Family Nurse Practitioner student with comprehensive experiences in health promotion and the integration and management of acute and chronic health problems in individuals across the lifespan. In addition, preparation for advanced practice certification, certification examination and state licensure processes are addressed.

Prereq.: NURS 7050.

NURS 8900 Pharmacology for Nurse Anesthetists 1 3 s.h.

Provides an opportunity to focus on the advanced principles of anesthesia related to pharmacology. Presents in-depth material and includes discussions on the pharmacology of various classes of anesthetics and adjuvant therapeutics employed by nurse anesthetists, including anesthetic induction agents, benzodiazepines, opioid agonists/antagonists/agonist-antagonist, neuromuscular blocking agents, and local anesthetics.

Prereq.: Admission and enrollment in the DNP Nurse Anesthesia program.

NURS 8901 Anatomy, Physiology and Pathophysiology for Nurse Anesthetists 1 3 s.h.

An advanced study of the structure and function of the human body, with an emphasis on the neural, muscular and endocrine systems and pathophysiological conditions involving those systems.

Prereq.: Acceptance and Enrollment in the DNP Nurse Anesthesia Program.

NURS 8902 Healthcare Biostatistics 3 s.h.

This course will cover principles of biostatistics in the context of public health applications. It will include the basic techniques for analyzing and investigating public health issues including disparities. Statistical package SPSS will be used.

Prereq.: Acceptance and Enrollment in the DNP Nurse Anesthesia Program.

NURS 8903 Professional Role of Nurse Anesthesia Practice 1 s.h.

This course is an introduction to the professional role development of the nurse anesthetist. It is designed to introduce students to the basics of nurse anesthesia practice and the role of nurse anesthetists as anesthesia providers. Elizabeth Health Center School for Nurse Anesthetists.

Prereq.: Acceptance into the nurse anesthesia program at St.

NURS 8904 Chemistry, Biochemistry, and Physics for Nurse Anesthetists 3 s.h.

This course enables nurse anesthesia students to identify principles of chemistry, biochemistry, and physics in relation to anesthesia drug administration. The chemical composition of, and physiologic response to common anesthesia drugs are examined. Students will learn to predict the physiological response of drugs based on gas laws and the nature of fluids and vapors as they apply to anesthesia.

Prereq.: Acceptance and Enrollment in the DNP Nurse Anesthesia Program.

NURS 8905 Clinical Practicum 1 1 s.h.

This practicum introduces students to the clinical setting, beginning with orientation to each of the clinical sites. Nurse anesthesia students are introduced to the construction and execution of an anesthesia care plan. Students will experience supervised participation in actual administration of anesthesia. Integrates internalization of theoretical concepts and techniques and application in anesthetic management toward the achievement of the terminal objectives for competency in entry-level anesthesia practice. 120 clocked clinical hours. Graded S/U.

Prereq.: Acceptance and Enrollment in the DNP Nurse Anesthesia Program.

NURS 8906 Pharmacology for Nurse Anesthetists 2 3 s.h.

Provides an opportunity to focus on the advanced principles of anesthesiarelated pharmacology. Focuses on anesthesia related uses and considerations with antihypertensives, alpha and beta adrenergic receptor agonist/ antagonists, and anticoagulants. Presents in-depth material and discussions on the pharmacology of various drugs that contribute to pathological conditions such as malignant hyperthermia, asthma and congestive heart failure.

Prereq.: NURS 8900.

NURS 8907 Anatomy, Physiology and Pathophysiology for Nurse Anesthetists 2 3 s.h.

An advanced study of the structure and function of the human body, with an emphasis on the cardiovascular, respiratory, renal and hepatic systems as well as the pathological conditions involving those systems. **Prereq.:** NURS 8901.

NURS 8908 Advanced Health Assessment 3 s.h.

This course explores advanced health assessment utilizing an extensive health history and physical exam. The course focuses on developing refined health history taking, psychological assessment, and physical assessment skills across the lifespan. Emphasis is placed on detailed health history assessment, differentiation, interpretation, and documentation of normal and abnormal assessment findings.

Prereq.: Acceptance and Enrollment in the DNP Nurse Anesthesia Program.

NURS 8910 Introduction to Clinical Anesthesia 2 s.h.

This course is an introduction to the key concepts of nurse anesthesia clinical practice including the anesthesia machine, airway/airway management, and fluid & blood administration and management.

Prereq.: Acceptance into the nurse anesthesia program at St Elizabeth Health Center School for Nurse Anesthetists.

NURS 8911 Clinical Practicum 2 1 s.h.

Nurse anesthesia students construct and execute an anesthesia care plan with clinical faculty supervision and collaboration. Students experience slightly more independent participation in actual administration of anesthesia while still under direct supervision by clinical faculty. Determine theoretical concepts and techniques and application in anesthetic management toward the achievement of the terminal objectives for competency in entry-level anesthesia practice. Semester course; 150+ clocked clinical hours. One day per week. Graded S/U.

Prereq.: NURS 8905.

NURS 8912 Principles and Practice of Nurse Anesthesia 3 s.h.

This course is designed to cover more complex, case specific expectations and considerations for the nurse anesthesia student using nontraditional teaching methods including study guides, case studies, and extensive discussion. **Prereq.:** Successful completion of NURS 8910.

NURS 8913 Principles of Anesthesia 1 3 s.h.

Basic theory of anesthesia administration, preanesthetic assessment, physical examination, monitoring. Case management including respiratory, cardiac, and vascular. Face to face lecture format.

Prereq.: Successful completion of NURS 8910.

NURS 8914 Clinical Practicum 3 3 s.h.

Provides intensive experience in all clinical anesthesia areas. Represents an integral phase of sequenced clinical progress toward the achievement of competency in entry-level anesthesia practice. Includes clinical rotations to various affiliate sites to gain experience in management of specialized anesthetic considerations. Emphasizes increased responsibility for the delivery of a comprehensive anesthetic regime along the educational/ experiential continuum. 300+ clocked hours. 3 full days per week in the operating room setting. Graded S/U. **Prereq.:** NURS 8911.

NURS 8915 Principles of Anesthesia 2 3 s.h.

Introduces the nurse anesthesia student to concepts necessary to formulate, execute, and revise a safe, individualized anesthetic in obstetric and pediatric populations, and in those receiving regional blocks. In depth construction of the anesthesia care plan to include anesthetic techniques, prevention of complications, fluid management, monitoring and utilization of anesthesia equipment. Provides guided practical experience associated with course concepts, including practice with and evaluation of task-specific skills in both simulated and actual operating room environments. Includes advanced obstetric, regional, and pediatric anesthesia concepts, including anesthetic considerations and/or implications. Integrates the use of information system technology for enhancing regional anesthesia block performance.

NURS 8916 Health Care Policy 3 s.h.

The primary focus of this course is to explore the leadership role of nurses in health policy development and implementation as well as the role of research in health care policy formation and planning. Special emphasis is placed on selected national and international health policy issues that form the socio-political and economic context of nursing care and practice. Ethical dimensions of public policy formulations and implementation are highlighted.

NURS 8917 Evidence Based Practice 1 3 s.h.

This course focuses on critically analyzing and evaluating research evidence. Evidence-based practice concepts will be used. Methods of generating evidence through research are discussed.

Prereq.: NURS 8902 or equivalent statistics course.

NURS 8918 Clinical Practicum 4 3 s.h.

Provides intensive experience in all clinical anesthesia areas. Represents an integral phase of sequenced clinical progress toward the achievement of competency in entry-level anesthesia practice. Includes clinical rotations to various affiliate sites to gain experience in management of specialized anesthetic considerations. Emphasizes increased responsibility for the delivery of a comprehensive anesthetic regime along the educational/ experiential continuum. Semester course; 300+ clocked clinical hours. Graded S/U.

Prereq.: NURS 8914.

NURS 8919 Principles of Anesthesia 3 3 s.h.

This course covers the preanesthetic assessment, physical examination, monitoring, and administration of anesthesia in patients with pathophysiological conditions of the central nervous, renal, hepatic, or hematologic systems. Subject matter is presented on a continuum from basic to advanced theory.

Prereq.: NURS 8915.

NURS 8920 Ultrasound and Radiology 2 s.h.

Nurse anesthesia students investigate the practice of ultrasound-guided, regional anesthesia while supporting the core concepts of ultrasound machine operation, needle guidance, and sonoanatomy. An in-depth breakdown of the essential strategies used to identify radiological and sonographic landmarks for locating and identifying target nerves and key anatomy structures is presented.

Prereq.: Acceptance and Enrollment in the DNP Nurse Anesthesia Program.

NURS 8921 Evidence-Based Practice 2 3 s.h.

This course focuses on identifying and evaluating current literature in order to identify evidence-based clinical practice recommendations. Methods for translating evidence-based knowledge to inform nursing clinical practice will be used.

Prereq.: NURS 8917.

NURS 8922 Clinical Practicum 5 3 s.h.

Provides intensive experience in all clinical anesthesia areas. Represents an integral phase of sequenced clinical progress toward the achievement of competency in entry-level anesthesia practice. Includes clinical rotations to various affiliate sites to gain experience in management of specialized anesthetic considerations. Emphasizes increased responsibility for the delivery of a comprehensive anesthetic regime along the educational/ experiential continuum. Semester course; 300+ clocked clinical hours. Graded S/U.

Prereq.: NURS 8918.

NURS 8923 Principles of Anesthesia 4 3 s.h.

This course covers the preanesthetic assessment, physical examination, monitoring, and administration of anesthesia to obese and geriatric patients. It will also cover professional aspects of nurse anesthesia practice including nurse anesthesia law, independent practice, and finance planning and management.

Prereq.: NURS 8919.

NURS 8924 Epidemiology 2 s.h.

Epidemiologic concepts of populations for understanding and using health research is the focus. Principles and methods of data analysis central to understanding health-related indicators for population health management will be used. Students will be prepared to function as members of a research team.

Prereq.: Acceptance and Enrollment in the DNP Nurse Anesthesia Program.

NURS 8925 Clinical Practicum 6 4 s.h.

Provides intensive experience in all clinical anesthesia areas. Represents an integral phase of sequenced clinical progress toward the achievement of competency in entry-level anesthesia practice. Includes clinical rotations to various affiliate sites to gain experience in management of specialized anesthetic considerations. Emphasizes increased responsibility for the delivery of a comprehensive anesthetic regime along the educational/ experiential continuum. Semester course; 450 clocked clinical hours. Graded S/U.

Prereq.: NURS 8922.

NURS 8926 Principles of Anesthesia 5 3 s.h.

This course addresses various topics such as alterations in immunity (infectious and immune disorders) cancer, trauma and burns, and substance abuse disorders as well as anesthetic considerations for each. **Prereq.:** NURS 8923.

NURS 8927 DNP Scholarly Project 1 3 s.h.

Focuses on identification of relevant clinical issues in anesthesiology with attendant formulation of critically applicable questions and examination of the relevant research evidence that addresses those questions. Students implement and evaluate a terminal project and disseminate the results through an oral and/or poster presentation, manuscript submission to a peer-reviewed journal or another appropriate medium. **Prereq.:** NURS 8921.

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NURS 8928 Healthcare Finance and Practice Management 2 s.h.

This course explores the role and examines healthcare finance and economics from the perspective of the advanced practice nurse. Emphasis is given to analysis and synthesis of practice behaviors specific to the development of the advanced practice role. Financial management principles, the healthcare reimbursement system, reimbursement process, and factors influencing the financial environment are discussed.

Prereq.: Acceptance and Enrollment in the DNP Nurse Anesthesia Program.

NURS 8929 Clinical Practicum 7 4 s.h.

Provides intensive experience in all clinical anesthesia areas. Represents an integral phase of sequenced clinical progress toward the achievement of competency in entry-level anesthesia practice. Includes clinical rotations to various affiliate sites to gain experience in management of specialized anesthetic considerations. Emphasizes increased responsibility and supervised autonomy for the delivery of a comprehensive anesthetic regime along the educational/experiential continuum. Semester course; 450+ clocked clinical hours. Graded S/U.

NURS 8930 Ethics in Advanced Nursing Practice 2 s.h.

This course explores the philosophic basis and derived theories of ethics and their implications for advanced nursing practice. Using ethical principles, students will examine a variety of clinical, research and practice management dilemmas that arise in the provision of advanced practice nursing services to individuals, populations and communities. Cultural competence and transcultural nursing practices will also be explored.

Prereq.: Acceptance and Enrollment in the DNP Nurse Anesthesia Program.

NURS 8931 DNP Scholarly Project 2 3 s.h.

Focuses on identification of relevant clinical issues in anesthesiology with attendant formulation of critically applicable questions and examination of the relevant research evidence that addresses those questions. Students implement and evaluate a terminal project and disseminate the results through an oral and/or poster presentation, manuscript submission to a peer-reviewed journal or another appropriate medium. **Prereq.:** NURS 8927.

NURS 8932 Teaching, Curriculum and Evaluation Seminar 1 s.h.

This course examines the principles of teaching and learning applicable to the anesthesia didactic and clinical environment. Strategies are presented in teacher/learner communication, presentation development and strategies, curriculum designs and methods of evaluation pertinent to nurse anesthesia education.

Prereq.: Acceptance and Enrollment in the DNP Nurse Anesthesia Program.

NURS 8933 Clinical Practicum 8 4 s.h.

Provides intensive experience in all clinical anesthesia areas. Represents an integral phase of sequenced clinical progress toward the achievement of competency in entry-level anesthesia practice. Includes clinical rotations to various affiliate sites to gain experience in management of specialized anesthetic considerations. Emphasizes increased responsibility and supervised autonomy for the delivery of a comprehensive anesthetic regime along the educational/experiential continuum. Semester course; 450+ clocked clinical hours. Graded S/U.

NURS 8934 Leadership and Collaboration for the DNP Nurse Anesthetist 2 s.h.

This course focuses on nursing leadership incorporating theory and research as it applies to the role of the Doctor of Nursing Practice in a variety of settings. The focus is developing advanced leadership and management skills, organizational effectiveness, power and influence skills, change management. **Prereq.:** Acceptance and Enrollment in the DNP Nurse Anesthesia Program.

NURS 8935 Clinical Practicum 9 4 s.h.

Provides intensive experience in all clinical anesthesia areas. Represents an integral phase of sequenced clinical progress toward the achievement of competency in entry-level anesthesia practice. Includes clinical rotations to various affiliate sites to gain experience in management of specialized anesthetic considerations. Emphasizes full responsibility for the delivery of a comprehensive anesthetic regime along the educational/experiential continuum with full supervision and guidance. Semester course; 450+ clocked clinical hours. Graded S/U.

Prereq.: NURS 8933.

NURS 8936 Anesthesia Synthesis: Comprehensive Review 2 s.h. This advanced course provides an opportunity for third-year doctoral

anesthesia students to integrate the principle anesthesia concepts learned to date. Anesthesia Synthesis is not solely a traditional "board review". Instead, it includes the cerebral application of the concepts studied in previous courses. Graded S/U.

Prereq.: Acceptance and Enrollment in the DNP Nurse Anesthesia Program.

Adult-Gerontology Acute Care Nurse Practitioner

Graduate Program Director

Wendy M. Thomas, DNP, CNS, FNP 3313 Cushwa Hall (330) 941-2638 wmthomas@ysu.edu

Prepare to provide comprehensive and holistic care to a culturally diverse, acutely and chronically ill population with the knowledge and skills you will gain in the Master of Science in Nursing – Adult Gerontology Acute Care Nurse Practitioner online program from YSU.

In this online MSN AG-ACNP program, you will learn clinical manifestations of and patient response to particular patient care challenges (pulmonary, cardiovascular, etc.) with an emphasis on physical assessment findings for determining diagnoses and planning patient care needs as well as health promotion and maintenance.

This accredited nursing program includes a supervised clinical practicum consisting of 540 hours in an acute care setting. Our MSN core curriculum features an integrated capstone course, along with studies of pathophysiology, diagnostics and technologies, pharmacology, and more.

The program is delivered in a fully online format (https://online.ysu.edu/ degrees/nursing/msn/agacnp/).

Youngstown State University online nursing program must meet the standards of the state(s) in which we possess authority to provide education and may only admit students from states in which we have approval. Online nursing program students must complete the program in the state of Ohio, Pennsylvania, West Virginia, Michigan, or Florida.

Graduates of this program will be qualified and eligible to take the American Nurses Credentialing Center certification examination. Following national certification, graduates are also qualified to be recognized as an Adult Gerontology - Acute Care Nurse Practitioner and are granted prescriptive authority through the State Board of Nursing.

Admission Requirements - AG-ACNP MSN

Official transcripts from all institutions previously attended

BSN degree with 3.0 undergraduate GPA

Valid, current unencumbered RN license in the state you will complete practicum hours

1 year of recent critical care experience

- 1. Complete graduate admissions application and pay \$45 non-refundable application fee
- 2. BSN degree from an accredited program
- 3. Regular admission requires a cumulative undergraduate grade point average of at least 3.0 (on a 4.0 scale) and verification of work experience
- Minimum 1 year of *recent practice as a registered nurse by admission start date
- Minimum 1 year of recent critical care experience is required (this can include emergency room, ICU, or intermediate acute care experience) prior to registering for the first specialty course
- 6. Official transcripts from all colleges/universities attended
- Verification of a current, unencumbered RN license and expiration date in the state in which the student is licensed and practices and will be completing practicum hours

Clinical Hours and Experience

Applicants will complete a Supplemental Employment Verification form as part of the application process. This is used to verify *recent clinical hours and experience.

*Recent clinical experience is defined as clinical RN work experience within 3 years of first practicum course.

- Current BLS certification, immunizations, drug screen and criminal background checks are maintained while in the program annually
- · Current ACLS certification required prior to the start of clinicals

The YSU online nursing programs must meet the standards of the state(s) in which authority is approved to provide education and may only admit students from those states. Online nursing students must complete the program in the state of Ohio, Pennsylvania, West Virginia, or Michigan.

The areas of coursework in the MSN program include core courses, and one of the following options:

· Adult-Gerontology Acute Care Nurse Practitioner

The breakdown of these course requirements is as follows:

Adult-Gerontology Acute Care Nurse Practitioner

TITLE	S.H.
Healthcare Issues and Trends	3
Theoretical Foundations in Science and Research	3
Advanced Pathophysiology	3
Advanced Pharmacology	3
Advanced Health Assessment	3
Differential Diagnosis	3
Advanced Diagnostics and Technologies	3
Role Development in Advanced Practice	3
Capstone Practicum	3
are Option Courses	
Adult Gerontology Acute Care 1	3
Adult Gerontology Acute Care 1 Practicum	3
Adult Gerontology Acute Care 2	3
Adult Gerontology Acute Care 2 Practicum	3
Adult Gerontology Acute Care 3	3
	Healthcare Issues and Trends Theoretical Foundations in Science and Research Advanced Pathophysiology Advanced Pharmacology Advanced Pharmacology Advanced Health Assessment Differential Diagnosis Advanced Diagnostics and Technologies Role Development in Advanced Practice Capstone Practicum are Option Courses Adult Gerontology Acute Care 1 Adult Gerontology Acute Care 2 Adult Gerontology Acute Care 2 Adult Gerontology Acute Care 2 Practicum

Total Semester Hours

Centofanti School of Nursing MSN/Post-Master's Grade Requirements

Satisfactory academic progress at the graduate level is maintained by satisfying the following criteria:

- A degree-seeking graduate student must maintain a minimum grade point average of 3.0 (on a 4.0 scale). *Any required course grade of D or F must be repeated and passed with a grade of C or better.
- A degree-seeking graduate student must successfully meet the requirements, including the time requirement, of all comprehensive examinations of the degree program.
- A degree-seeking graduate student must complete with a passing grade any thesis requirements (or the equivalent) of the degree program.
- A non-degree graduate student must maintain a minimum grade point average of 3.0 (on a 4.0 scale).
- *Grades of D and F carry no graduate credit but will be used to determine the student's grade point average. A student has the privilege of repeating a course once, but the repetition is treated merely as another course, along with the first, in calculating the student's grade point average.
- *Any required course grade of D or F must be repeated and passed with a grade of C or better. Students may not advance in the program until they have taken the failed course, passed with a grade of C or better and maintain a GPA of 3.0.

For degree programs requiring up to 39 semester hours for completion, a student may count no more than six semester hours of coursework with a grade of C toward the minimum graduation hour requirements. For students in programs requiring 40 semester hours or more for completion, no more than nine semester hours of coursework with a grade of C may count toward the minimum graduation hour requirement.

*Grade Policy - Graduate Nursing Option-specific courses

In the six (6) **AGACNP courses** (NURS 7037, 7038, 7039, 7040, 7041, 7042), the student MUST earn a grade of B or A. If a student earns a C or lower grade in any of these courses, the course MUST be repeated. The student can only repeat the course once. If a grade of B or A is not earned on the second attempt, the student will not be permitted to progress in the Graduate Nursing program.

MSN Student Learning Outcomes

All graduates of the program are prepared to:

- Synthesize theory and research from nursing and related disciplines for advanced nursing roles.
- Utilize leadership strategies to influence health and health care and to promote the nursing profession in the advanced nursing role.
- Expand the knowledge of evidence-based practice by identifying nursing research problems and contributing to research investigations.
- Integrate assessment of own learning in developing a lifelong pattern of scholarly inquiry.

Upon successful completion of the MSN program, graduates are eligible to sit for national certification examinations. Once certified, graduates must apply for a Certificate of Authority to practice as an Advanced Practice Nurse in the State of Ohio or in the state in which they intend to practice.

Family Nurse Practitioner Overview Graduate Program Director

Wendy M. Thomas, DNP, CNS, FNP 3313 Cushwa Hall (330) 941-2638 wmthomas@ysu.edu

3 **45**

> Emphasizing the delivery of primary care to families and individuals of all ages within the healthcare delivery system, the Master of Science in Nursing – Family Nurse Practitioner online program from YSU centers on professional nursing issues, nursing science, and research methods for building a successful, evidence-based practice.

In this online MSN FNP program, you will gain the knowledge, skills, and professional behaviors required to provide comprehensive and holistic primary care to a culturally diverse population. You will study health promotion, health maintenance, and management of common health problems pertaining to children, adolescents, women, adults and older adults, and family centered primary care with an emphasis on physical assessment, diagnosis, and management of patient care.

The program includes a supervised clinical practicum consisting of 600 hours in a variety of primary care settings. Our MSN core curriculum features an integrated capstone course, along with studies of pathophysiology, diagnostics and technologies, pharmacology and more.

The program is delivered in a fully online format (https://online.ysu.edu/ degrees/nursing/msn/family-nurse-practitioner/).

Youngstown State University online nursing program must meet the standards of the state(s) in which we possess authority to provide education and may only admit students from states in which we have approval. Online nursing program students must complete the program in the state of Ohio, Pennsylvania, West Virginia, Michigan, or Florida.

Graduates of this program will be qualified and eligible to take the American Nurses Credentialing Center and/or the American Academy of Nurse Practitioners FNP certification examinations. Following national certification, graduates are qualified to be recognized as a Family Nurse Practitioner and granted prescriptive authority through the State Board of Nursing.

Admission Requirements

Complete online application and pay \$45 non-refundable application fee.

Official transcripts from all institutions previously attended

BSN degree with 3.0 undergraduate GPA

Valid, current unencumbered RN license in the state you will complete practicum hours

Minimum 1 year of recent practice as a registered nurse by admission start date

Complete graduate admissions application and pay \$45 non-refundable application fee

- 1. BSN degree from an accredited program
- 2. Regular admission requires a cumulative undergraduate grade point average of at least 3.0 (on a 4.0 scale) and verification of work experience
- 3. Minimum 1 year of *recent practice as a registered nurse by admission start date
- 4. Official transcripts from all colleges/universities attended

Verification of a current, unencumbered RN license and expiration date in the state in which the student is licensed and practices and will be completing practicum hours

Clinical Hours and Experience

Applicants will complete a Supplemental Employment Verification form as part of the application process. This is used to verify *recent clinical hours and experience.

*Recent clinical experience is defined as clinical RN work experience within 3 years of first practicum course.

 Current BLS certification, immunizations, drug screen and criminal background checks are maintained while in the program annually

The YSU online nursing programs must meet the standards of the state(s) in which authority is approved to provide education and may only admit students from those states. Online nursing students must complete the program in the state of Ohio, Pennsylvania, West Virginia, Michigan, or Florida.

The areas of coursework in the M.S.N. program include core courses, and one of the following options:

• Family Nurse Practitioner option (27 semester hours)

The breakdown

COURSE	TITLE	S.H.
NURS 7051	Family Nurse Practitioner 4 Practicum (Increase in	3
	credit hours to 3 ch)	

of these course requirements is as follows:

COURSE	TITLE	S.H.
Core Courses		
NURS 6900	Healthcare Issues and Trends	3
NURS 6901	Theoretical Foundations in Science and Research	3
NURS 6902	Advanced Pathophysiology	3
NURS 6903	Advanced Pharmacology	3
NURS 6904	Advanced Health Assessment	3
NURS 6917	Differential Diagnosis	3
NURS 6918	Advanced Diagnostics and Technologies	3
NURS 7003	Role Development in Advanced Practice	3
NURS 7005	Capstone Practicum	3
Family Nurse Prac	titioner (FNP) Option Courses	
NURS 7045	Family Nurse Practitioner 1	3
NURS 7046	Family Nurse Practitioner 2	3
NURS 7047	Family Nurse Practitioner 3	3
NURS 7048	Family Nurse Practitioner 1 Practicum	3
NURS 7049	Family Nurse Practitioner 2 Practicum	3
NURS 7050	Family Nurse Practitioner 3 Practicum	3
NURS 7051	Family Nurse Practitioner 4 Practicum	3

Total Semester Hours

Centofanti School of Nursing MSN/Post-Master's Grade Requirements

Satisfactory academic progress at the graduate level is maintained by satisfying the following criteria:

 A degree-seeking graduate student must maintain a minimum grade point average of 3.0 (on a 4.0 scale). *Any required course grade of D or F must be repeated and passed with a grade of C or better.

- A degree-seeking graduate student must successfully meet the requirements, including the time requirement, of all comprehensive examinations of the degree program.
- A degree-seeking graduate student must complete with a passing grade any thesis requirements (or the equivalent) of the degree program.
- A non-degree graduate student must maintain a minimum grade point average of 3.0 (on a 4.0 scale).
- *Grades of D and F carry no graduate credit but will be used to determine the student's grade point average. A student has the privilege of repeating a course once, but the repetition is treated merely as another course, along with the first, in calculating the student's grade point average.
- *Any required course grade of D or F must be repeated and passed with a grade of C or better. Students may not advance in the program until they have taken the failed course, passed with a grade of C or better and maintain a GPA of 3.0.

For degree programs requiring up to 39 semester hours for completion, a student may count no more than six semester hours of coursework with a grade of C toward the minimum graduation hour requirements. For students in programs requiring 40 semester hours or more for completion, no more than nine semester hours of coursework with a grade of C may count toward the minimum graduation hour requirement.

*Grade Policy - Graduate Nursing Option-specific courses

In the seven (7) **FNP courses** (NURS 7045, NURS 7046, NURS 7047, NURS 7048, NURS 7049, NURS 7050, NURS 7051), the student MUST earn a grade of B or A. If a student earns a C or lower grade in any of these courses, the course MUST be repeated. The student can only repeat the course once. If a grade of B or A is not earned on the second attempt, the student will not be permitted to progress in the Graduate Nursing program.

MSN Student Learning Outcomes

All graduates of the program are prepared to:

- Synthesize theory and research from nursing and related disciplines for advanced nursing roles.
- Utilize leadership strategies to influence health and health care and to promote the nursing profession in the advanced nursing role.
- Expand the knowledge of evidence-based practice by identifying nursing research problems and contributing to research investigations.
- Integrate assessment of own learning in developing a lifelong pattern of scholarly inquiry.

Upon successful completion of the MSN program, graduates are eligible to sit for national certification examinations. Once certified, graduates must apply for a Certificate of Authority to practice as an Advanced Practice Nurse in the State of Ohio or in the state in which they intend to practice.

Graduates of the Family Nurse Practitioner option are prepared to:

- provide primary care to families and persons of all ages within the health care delivery system
- incorporate a variety of theories from nursing and related fields into the nurse practitioner role
- analyze social issues related to the health care delivery system and advanced nursing practice

Nursing Education Admission Requirements

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Complete graduate admissions application and pay \$45 non-refundable application fee.

Official transcripts from all institutions previously attended

BSN degree with 3.0 undergraduate GPA

Valid, current unencumbered RN license in the state you will complete practicum hours

Minimum 1 year of recent practice as a registered nurse by admission start date

Complete graduate admissions application and pay \$45 non-refundable application fee

- 1. BSN degree from an accredited program
- 2. Regular admission requires a cumulative undergraduate grade point average of at least 3.0 (on a 4.0 scale) and verification of work experience
- 3. Minimum 1 year of *recent practice as a registered nurse by admission start date
- 4. Official transcripts from all colleges/universities attended
- 5. Verification of a current, unencumbered RN license and expiration date in the state in which the student is licensed and practices and will be completing practicum hours

Clinical Hours and Experience

Applicants will complete a Supplemental Employment Verification form as part of the application process. This is used to verify *recent clinical hours and experience.

*Recent clinical experience is defined as clinical RN work experience within 3 years of first practicum course.

· Current BLS certification, immunizations, drug screen and criminal background checks are maintained while in the program annually.

The YSU online nursing programs must meet the standards of the state(s) in which authority is approved to provide education and may only admit students from those states. Online nursing students must complete the program in the state of Ohio, Pennsylvania, West Virginia, or Michigan.

The areas of coursework in the M.S.N. program include core courses, and one of the following options:

· Nurse Education option (18 semester hours)

The breakdown of these course requirements is

COURSE	TITLE	S.H.
NURS 7022	Nurse Educator Practicum 1 (course title: Nurse Educator Practicum 1)	1

as follows:

COURSE	TITLE	S.H.
NURS 6900	Healthcare Issues and Trends	3
NURS 6901	Theoretical Foundations in Science and Research	3
NURS 6902	Advanced Pathophysiology	3
NURS 6903	Advanced Pharmacology	3
NURS 6904	Advanced Health Assessment	3
NURS 7018	Nursing Curriculum Design	3
NURS 7019	Nursing Instructional Methods	3
NURS 7020	Evaluation in Nursing Education	3
NURS 7021	Nurse Educator Role	3
NURS 7005	Capstone Practicum	3
NURS 7022	Nurse Educator Practicum 1	1
NURS 7023	Nurse Educator Practicum 2	2
Total Semester H	ours	33

Centofanti School of Nursing MSN/Post-**Master's Grade Requirements**

Satisfactory academic progress at the graduate level is maintained by satisfying the following criteria:

- A degree-seeking graduate student must maintain a minimum grade point average of 3.0 (on a 4.0 scale). *Any required course grade of D or F must be repeated and passed with a grade of C or better.
- · A degree-seeking graduate student must successfully meet the requirements, including the time requirement, of all comprehensive examinations of the degree program.
- · A degree-seeking graduate student must complete with a passing grade any thesis requirements (or the equivalent) of the degree program.
- · A non-degree graduate student must maintain a minimum grade point average of 3.0 (on a 4.0 scale).
- *Grades of D and F carry no graduate credit but will be used to determine the student's grade point average. A student has the privilege of repeating a course once, but the repetition is treated merely as another course, along with the first, in calculating the student's grade point average.
- *Any required course grade of D or F must be repeated and passed with a grade of C or better. Students may not advance in the program until they have taken the failed course, passed with a grade of C or better and maintain a GPA of 3.0

For degree programs requiring up to 39 semester hours for completion, a student may count no more than six semester hours of coursework with a grade of C toward the minimum graduation hour requirements. For students in programs requiring 40 semester hours or more for completion, no more than nine semester hours of coursework with a grade of C may count toward the minimum graduation hour requirement.

*Grade Policy - Graduate Nursing Option-specific courses

In the six (6) Nursing Education courses (NURS 7018, NURS 7019, NURS 7020, NURS 7021, NURS 7022, NURS 7023), the student MUST earn a grade of B or A. If a student earns a C or lower grade in any of these courses, the course MUST be repeated. The student can only repeat the course once. If a grade of B or A is not earned on the second attempt, the student will not be permitted to progress in the Graduate Nursing program.

MSN Student Learning Outcomes

All graduates of the program are prepared to:

- · Synthesize theory and research from nursing and related disciplines for advanced nursing roles.
- · Utilize leadership strategies to influence health and health care and to promote the nursing profession in the advanced nursing role.
- · Expand the knowledge of evidence-based practice by identifying nursing research problems and contributing to research investigations.
- · Integrate assessment of own learning in developing a lifelong pattern of scholarly inquiry.

Upon successful completion of the MSN program, graduates are eligible to sit for national certification examinations. Once certified, graduates must apply for a Certificate of Authority to practice as an Advanced Practice Nurse in the State of Ohio or in the state in which they intend to practice.

Graduates of the Nurse Education option are prepared to:

- practice in advanced nurse educator roles within Academic. Health Care Delivery and Community settings.
- · incorporate a variety of theories from nursing and related fields into nursing practice and education roles.

al Semester Hours

 analyze social issues related to Health Care Delivery Systems and nursing education.

Master of Social Work Program Director

Dr. Sherri Harper Woods

3375 Cushwa Hall (330) 941-3446 sdwoods02@ysu.edu

Program Description

WELCOME! The social work profession combines knowledge skill and compassion to address the common social challenges people encounter. The Master of Social Work program prepares graduates for advanced social work practice with a wide range of clients within a wide range of agency settings.

The MSW program's focus is on work with individuals and families. The organizing framework for the M.S.W. program at Youngstown State University is the strengths-based empowerment approach that emphasizes:

- helping individuals, families, and communities recognize and utilize their capacities;
- · gain awareness of available options;
- · understand the barriers and obstacles they may face;
- · reinforce their hopes and aspirations; and
- integrate internal and external resources to improve the quality of their lives.

The purpose of the M.S.W. program is to develop competent, ethical, and effective professionals capable of utilizing advanced knowledge, skills, and values to promote social justice in the delivery of social services within a diverse society. The integration social work knowledge, values, and skills are achieved through both academic coursework and field placement experiences.

Graduates find employment the practice areas of mental health, medical social work, family services, schools, substance abuse treatment, developmental disabilities, child welfare, the courts among others. Graduates of the Master of Social Work program are eligible to apply for licensure as a Licensed Social Worker (LSW) and a Licensed Independent Social Worker (LISW). Licensure is required for the majority of positions in the human services employment sector.

Program Locations

A full-time two-year program and part-time three- and four-year programs are available on the Youngstown campus. An advanced standing program is also available on the main (Youngstown) campus for students that have completed a Bachelor of Social Work degree. Courses on the Youngstown campus are offered on Saturdays and weekday evenings. Students should also be available at additional times (18 hours per week) for field internship engagement that most frequently occurs during daytime, weekday hours.

One-, two-, three-, and four-year programs are available in partnership with Lorain County Community College in Elyria, Ohio and Lakeland County Community College in Kirtland, Ohio. Our Advanced Standing (39 hour) programs are also available for students who have completed a Bachelor of Social Work degree at the Lorain and Lakeland community college sites. Faceto-face courses at these location are offered on Saturdays with other courses in online format. Students should be available at additional times (18 hours per week) for field internship engagement that most frequently occurs during daytime, weekday hours.

Accreditation

The Master of Social Work program is accredited by the Council on Social Work Education http://www.cswe.org/ . Most recent accreditation was

achieved in 2021. The program will be due for reaccreditation in 2028. Graduates of the MSW program are eligible for a license in social work (LISW) granted by the Ohio Counselor, Social Work, and Marriage and Family Therapist Board.

Admission Requirements

Applicants to the M.S.W. program are encouraged to review the admission criteria listed below, as they exceed the minimum standards established by the College of Graduate Studies. Meeting minimum criteria does not guarantee admission. Applicants are evaluated by the Social Work Department's Graduate Admissions Committee to ensure that qualifications are evaluated in a manner consistent with the M.S.W. program's requirements.

Admission to the M.S.W. program is based on the following criteria that allow evaluation of the student's potential to succeed in graduate-level social work education, as well as an assessment of their ability to engage in ethical and competent social work practice in a diverse society.

Regular Admission

In addition to the minimum College of Graduate Studies admissions requirements, all applicants must meet the following requirements for regular admission to the Master of Social Work program:

- an undergraduate degree, preferably in a social science, from an accredited college or university;
- a cumulative grade point average of 3.0 or above (on a 4.0 scale) in all undergraduate coursework;
- work or volunteer experience related to preparation for professional social work practice;
- Names and contact information for three references. References should include one academic source, one professional source, and one additional source from either of the aforementioned;
- a professional statement reflecting how completion of the M.S.W. will impact upon the student's professional goals and objectives; and if applicable, a description of the applicant's previous social work/human service work experience
- an optional personal interview and/or additional information as requested by the program's admission committee.

Provisional Admission

Applicants with a undergraduate cumulative grade point average of 2.7 to 2.99 (on a 4.0 scale) may be admitted provisionally. Provisional students must maintain a 3.0 GPA to continue in the program. Provisionally admitted students can be changed to regular when requirements for regular admission have been met.

advanced standing Program ADMISSION (39 semester hours)

Applicants who have a Bachelor's of Social Work degree from a Council on Social Work Education (C.S.W.E) program are automatically considered for advanced standing status. The advanced standing program permits students to complete all requirements of the M.S.W. degree in 39 semester hours. The regular program is completed in 60 semester hours. The Advanced Standing MSW program can be completed in as early as one year. However, students may choose to complete the required 39 semester hours within two, three, or four years.

Applicants seeking admission to the Advanced Standing Program must meet all admission requirements for the Master of Social Work Program in addition to the following:

• possess a Bachelor of Social Work degree from a C.S.W.E. accredited program within seven years prior to enrollment; individuals who completed their degree prior to seven years and have worked in the field of social work you may petition for an exception to the MSW Committee. • have achieved a cumulative grade point average of at least a 3.0 (on a 4.0 scale) in all undergraduate coursework or;

 \cdot have at least a 2.7 overall GPA and achieved A's and B's in all junior and senior level social work courses.

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 enrollment in the MSW program and the limitations prior convictions may impose on their ability to practice the profession of social work.

Graduate Faculty

Mari L. Alschuler, Ph.D., Professor

Reflective journaling; creative arts therapies; LGBTQI issues; student veterans; clinical supervision; group work; macro practice

Dana Davis, Ph.D., Associate Professor, Chair Harm reduction; housing; teaching methodology

Ronald E. Davis, Ph.D., Assistant Professor

Dessalegn Guyo, PhD, Assistant Professor

Charles T. Morgan, M.S., Lecturer

Meenakshi Venkataraman, Ph.D., Assistant Professor

Psychological, social, and spiritual aspects of adult mental illness; ancient Indian culture; gerontology; research in pedagogy; social work evaluation; international social work research

Jennifer Walker, M.S., Lecturer

Sherri Harper Woods, D.M., Assistant Professor Integrating spirituality into the therapeutic healing process; trauma-informed care; service learning and civic engagement

Traditional Program

Sixty semester hours of coursework are required for completion of the Master of Social Work degree. The program may be completed in two years, three years, or four years all beginning in the fall semester of each year. Foundation social work content is comprised of eight courses and two field practicums with an emphasis on the following areas:

- · social work values and ethics,
- diversity,
- populations at risk,
- · social and economic justice,
- · human behavior in the social environment,
- social welfare policy and services,
- social work practice,
- research, and
- · business skills for social workers.

The foundation field practicum is designed to provide the student with learning experiences that promote and integrate the achievement of foundation objectives. The foundation field practicum is taken in two consecutive semesters for a total of six credit hours (480 clock hours). All social work courses are 3 semester hours.

Advanced content areas consist of eight courses and two advanced field practicum with an emphasis on knowledge, skills, and values for advanced

direct social work practice with individuals and families. The advanced field practicum is designed to provide learning experiences that promote and integrate the achievement of advanced program objectives. The advanced practicum is taken in two consecutive semesters for a total of six credit hours (540 clock hours).

PROGRESSION OPTIONS:

MAIN CAMPUS: The 60 semester hour program can be completed in 2, 3 or 4 years (no summer courses). Courses are offered Saturdays and weekday evenings. Students engage in field internships throughout the 2 year option, in the second and third years of the 3 year option, and the third and fourth year of the 4 year option. Field internships most frequently occur daytime business hours.

LAKELAND and LORAIN CAMPUSES: The 60 hour program is completed in 2, 3 or 4 years (no summer courses). Students enroll in two or three course per semester. Courses are offered on Saturdays and online. Field internships occur in the final two years of the program. Field internships most frequently occur daytime business hours.

Course Outline: Traditional Program

COURSE	TITLE	S.H.
Foundation Course	es	
SCWK 6900	Human Behavior and the Social Environment 1	3
SCWK 6901	Oppression and Cultural Competence	3
SCWK 6902	Social Welfare Policy and Program Analysis	3
SCWK 6903	Social Work Foundation Practice 1	3
SCWK 6904	Field Education 1	3
SCWK 6905	Human Behavior and the Social Environment 2	3
SCWK 6906	Business Skills for Social Workers	3
SCWK 6907	Social Work Foundation Practice 2	3
SCWK 6909	Field Education 2	3
SCWK 7017	Advanced Treatment Planning and Outcomes	3
SCWK 7001	Substance Use Recovery Practices in Social Work	3
Advanced Courses	3	
SCWK 7000	Advanced Direct Practice 1	3
SCWK 7002	Trauma Informed Practices in Social Work	3
SCWK 7008	Social Work and the DSM	3
SCWK 7009	Field Education 3	3
SCWK 7003	Theory and Practice of Supervision	3
SCWK 7010	Advanced Direct Practice 2	3
SCWK 7012	Field Education 4	3
SCWK 7013	Capstone	3
Graduate Elective		3
Total Semester Ho	purs	60

Advanced Standing Program (39 hours)

PROGRAM PROGRESSION: (Main, Lakeland and Lorain campuses)

Applicants who have a Bachelor's of Social Work degree from a Council on Social Work Education (C.S.W.E) program are automatically considered for advanced standing status. The advanced standing program permits students to complete all requirements of the M.S.W. degree in 39 semester hours. The regular program is completed in 60 semester hours. The Advanced Standing MSW program can be completed in as early as one year. However, students may choose to complete the required 39 semester hours within two, three, or four years.

Applicants seeking admission to the Advanced Standing Program must meet all admission requirements for the Master of Social Work Program in addition to the following:

possess a Bachelor of Social Work degree from a C.S.W.E. accredited program within six years prior to enrollment;

have achieved a cumulative grade point average of at least a 3.0 (on a 4.0 scale) in all undergraduate coursework or;

have at least a 2.7 overall GPA and achieved A's and B's in all junior and senior level social work courses.

Course Outline: Advanced Standing Program (39 hours)

COURSE	TITLE	S.H.
SCWK 6906	Business Skills for Social Workers	3
SCWK 6910	Integrated Foundation (Graduate Elective)	3
SCWK 7000	Advanced Direct Practice 1	3
SCWK 7002	Trauma Informed Practices in Social Work	3
SCWK 7003	Theory and Practice of Supervision	3
SCWK 7008	Social Work and the DSM	3
SCWK 7001	Substance Use Recovery Practices in Social Work	3
SCWK 7017	Advanced Treatment Planning and Outcomes	3
SCWK 7009	Field Education 3	3
SCWK 7010	Advanced Direct Practice 2	3
SCWK 7012	Field Education 4	3
SCWK 7013	Capstone	3
Graduate Elective		3
Total Semester Hours		39

Learning Outcomes

The Master of Social Work Program at Youngstown State University is accredited by the Council for Social Work Education (CSWE) the leading accrediting body of social work education . As a result, our Learning Outcomes are dictated by the CSWE and continue to reflect the most up-to-date standards for social work education. These Learning Outcomes focus on the mastery of ten core competencies set by CSWE and reflect specific knowledge, values, skills, and resulting practice behaviors which guide assessment of student achievement.

Coursework contained in the MSW curriculum contributes to student achievement of these competencies. Foundation practice behaviors and advanced practice behaviors serve to provide a means to evaluate the extent to which these competencies have been met by students at the foundation and advanced practice levels of graduate social work education. These competencies are evaluated through the classroom and student engagement in social work field internships.

Learning Outcomes (Competencies):

- 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

Graduate Courses

SCWK 5826 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 5827 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 6900 Human Behavior and the Social Environment 1 3 s.h. An overview of normal individual development throughout the life span. Developmental stages, tasks, and circumstances as well as diversity in individual development will be examined. The influence of biological, psychological, and social systems on individual development throughout the life span constitutes the organizing theme for the course.

SCWK 6901 Oppression and Cultural Competence 3 s.h.

Examination of the history, demographic trends, and cultures of diverse groups who have been disenfranchised based on differences that include race, gender, age, socioeconomic class, sexual orientation, religion, and ability. Emphasis will be placed on understanding the experience of oppression among diverse groups and the implications for social work practice.

SCWK 6902 Social Welfare Policy and Program Analysis 3 s.h.

An historical perspective on the development of social problems as well as a critical analysis of social welfare institutions, programs, policy efforts, and services. Attention is given to the consequences of social and economic injustice and the effects that policy initiatives have upon vulnerable populations.

SCWK 6903 Social Work Foundation Practice 1 3 s.h.

A foundation methods course based on an advanced generalist social work practice perspective. This course demonstrates application of the problemsolving process or the planned change process in the context of the strengths perspective. Attention will be placed on planning interventions with diverse individuals, families, and small groups.

SCWK 6904 Field Education 1 3 s.h.

Professionally supervised practice in approved community agencies. Focus will be on increasing the student's analytic skills and repertoire of intervention modalities. The course is based on foundation coursework that emphasizes advanced generalist practice while promoting a strengths-based approach. Concurrent: SCWK 6903.

SCWK 6905 Human Behavior and the Social Environment 2 3 s.h.

An overview of theories and knowledge of the behavior of groups, organizations, and communities as well as the impact of these systems on individual behavior. Special emphasis is given to understanding the influence of mesosystems and macrosystems on social service organizations. Empowerment-based policies are explored. Prereq.: SCWK 6900.

SCWK 6906 Business Skills for Social Workers 3 s.h.

Overview of the principles, concepts, and terminology related to social work business practice. Topics include time management, financially responsible practice, managed care issues, organizational efficiency and effectiveness, outcome measurements, performance evaluation, marketing for nonprofit organizations, community building and collaborative efforts. State-of-the-art technology will be reviewed.

Prereq.: Social Work Majors Only.

SCWK 6907 Social Work Foundation Practice 2 3 s.h.

A foundation methods course based on an advanced generalist social work practice perspective. This course demonstrates application of the problemsolving process or planned change process in the context of the strengths perspective. Attention will be placed on planning interventions with diverse organizations and communities.

Prereq.: SCWK 6903.

SCWK 6909 Field Education 2 3 s.h.

Professionally supervised practice in approved community agencies. Focus will be on increasing both the student's analytic skills and repertoire of intervention modalities. The course is based on foundation coursework that emphasizes advanced generalist practice while promoting a strengths-based approach. Concurrent: SCWK 6907.

SCWK 6910 Integrated Foundation 3 s.h.

An advanced course that emphasizes social work values, ethical dilemmas/ implications, and the development of practice methods that integrate a strengths-based empowerment approach with individuals, families, and groups.

Prereq.: Social Work Majors Only.

SCWK 7000 Advanced Direct Practice 1 3 s.h.

The development of adversities experienced by individuals from conception through adulthood. The course employs a multisystems ecological perspective in discussing risk conditions, stressful life events, and the interplay of risk and protective factors that appear to be common to many childhood disorders and problems.

Prereq.: Social Work Majors Only.

SCWK 7001 Substance Use Recovery Practices in Social Work 3 s.h.

This course explores traditional and contemporary theories related to substance misuse and substance use disorders. Students will develop beginning-level practice application skills for intervening with individuals regarding their substance misuse. The course surveys a range of evidencebased approaches to: screening, assessment, and diagnosis of substance misuse/substance use disorder and related problems; determining the nature and severity of problems associated with substance use; evaluating readiness to change; and, treatment planning and intervention to ameliorate substance use problems. Content of this course meets the 40 hours of chemical dependency specific education in: theories of addiction, counseling procedures and strategies with addicted populations, group process and techniques working with addicted populations, assessment and diagnosis of addiction, treatment planning, ethics. Throughout the course we practice the ethical and professional use of language related to substance misuse, as well individuals engaged in addictive behavior and experiencing substance use disorders.

Prereq.: MSW student.

SCWK 7002 Trauma Informed Practices in Social Work 3 s.h.

Students will learn about trauma in a way that is relevant to clinical work through a bio-psycho-social-spiritual lens. The course will assist students in developing beginning trauma competency in clinical social work practice by introducing students to the core concepts (general theory and foundational knowledge), informing evidence-based assessment and treatment for traumainformed care. Strength-based and empowerment practices will be highlighted along with a focus on the identification of protective and promotive factors that foster resiliency and post-traumatic growth. **Prereq.:** Social Work Majors Only.

SCWK 7003 Theory and Practice of Supervision 3 s.h.

Explores advanced techniques for evaluating systems of all sizes. Methods and strategies for conducting program evaluation and single system research will be emphasized. Special emphasis will be placed on developing strengthsbased performance indicators.

Prereq.: Social Work Majors Only.

SCWK 7008 Social Work and the DSM 3 s.h.

This course examines social work in mental health and chemical dependency with an emphasis on the DSM and ICD. Application of assessment is through a bio-psycho-social-spiritual perspective with a focus on current practices.

SCWK 7009 Field Education 3 3 s.h.

A continuation of SCWK 7000 Advanced Direct Practice I. In addition to developing practice methods that integrate a strengths-based empowerment approach with individuals, this course incorporates theoretical frameworks and constructs from empowerment theory, the ecological perspective, solution-focused practice, the feminist perspective, person-centered practice, and other relevant, brief practice approaches. **Prereq.:** SCWK 7000.

SCWK 7010 Advanced Direct Practice 2 3 s.h.

Advanced field education placement. Students participate in planned experiences that integrate theoretical knowledge, social work practice skills, and social work ethics and values in direct or macro practice settings. Theoretical frameworks address micro and macro concerns respectively by emphasizing empowerment, individual strengths, solution- focused practice, community building, collaboration and organizational structures.

SCWK 7012 Field Education 4 3 s.h.

Field Education IV. This course provides opportunities for students to synthesize and integrate previous coursework from their social work education. Theoretical and experiential assignments are utilized to assist students with increased self-awareness and to prepare them for the transition from college to advanced professional social work practice that emphasizes the strengths-based approach.

SCWK 7013 Capstone 3 s.h.

Advanced seminar on selected topics in social work theory, methods, and research. May be repeated with different topics.

SCWK 7014 Selected Topics in Social Work 3 s.h.

SCWK 7017 Advanced Treatment Planning and Outcomes 3 s.h.

This course explores advanced techniques for evaluating practice in the field. Scientific methods are applied to the evaluation of social work practice and social work interventions are analyzed. Attention is placed on the student's ability to identify research based treatment modalities and outcomes. Single system design methods will be emphasized. Strengths-based performance indicators are highlighted.

Prereq.: MSW student.

SCWK 7020 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.

SCWK 7021 MSW Independent Study 1-6 s.h.

This course involves study under the personal supervision of a faculty member with the approval of the MSW 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 educational competencies.

Prereq.: MSW Student.

Certificate in Aging Studies Department of Health Professions

Daniel J. Van Dussen, Ph.D.

Cushwa Hall 1026

(330) 941-1683

djvandussen@ysu.edu

Certificate Description

The curriculum is designed from an interdisciplinary perspective of gerontology with a focus on epidemiology and health. This program will provide students with advanced education in issues facing older adults, their families and provide an in depth knowledge of the policies which impact aging and our population. The program consists of 18 semester hours, which may be completed in two semesters of full-time coursework or part time.

Admission Requirements

Applicants for this graduate certificate must meet the requirements for admission to the College of Graduate Studies at YSU.

COURSE	TITLE	S.H.
SOC 6905	Social Gerontology	3
GERO 6915		3
GERO 6906	Perspectives in Gerontology	3
GERO 6960		3
GERO 6998		3
Gerontology Elective		3
Total Semester Hours		18

Notes:

Students will be required to take one elective (3 semester hours). We will schedule at least one selected topics elective class per academic year. This gives students the opportunity to plan when they want to take this course based upon their professional goals.

Proposed Sequencing of Courses for Full-Time Students:

Year 1		
Fall		S.H.
GERO 6960		3
GERO 6906	Perspectives in Gerontology	3
GERO 6915		3
	Semester Hours	9
Spring		
GERO 6998		3
GERO 7094	Selected Topics	3
SOC 6905	Social Gerontology	3
	Semester Hours	9
	Total Semester Hours	18

Learning Outcomes

- 1. Foundational Competencies:
 - a. a. An advanced understanding and application of the interdisciplinary nature of gerontology and its application to the health and wellness of our aging population.
 - b. b. Define, compare and contrast, and apply the life span and life course perspective.
 - c. "Interpret, synthesize and apply inter-related bio-psycho-social concepts and theories of aging to knowledge on behalf of aging persons, their families and communities (AGHE Core Competencies Direct Quote)."
- 2. Learn, examine, and apply basic epidemiologic and distinguish between normal and disease processes associated with aging.
- 3. Examine the social aspects of aging including demographic, structural and interpersonal.
- 4. Examine and apply the research methods used by gerontologists to study the interdisciplinary nature of aging.
- Examine, interpret and apply the major social policies which impact our aging population. These include Social Security, Healthcare policy, Medicaid, and Medicare.
- 6. Apply the concepts of health and aging into the field of gerontology through our field practicum.

Certificate in Applied History

As of summer 2023, admission to the graduate certificate in Applied History has been suspended.

Applications to the program are not being accepted at this time.

Department of Humanities and Social Sciences, History Program

Dr. Martha Pallante, Certificate Director 540 DeBartolo Hall (330) 941-1611 mipallante@ysu.edu

Certificate Description

The certificate is designed to provide students a grounding in the skills, techniques, culture and opportunities associated with the Applied History field, and within the larger framework of Cultural Resource Management (CRM). Students earning the certificate may find work with state or local preservation groups, museums, historical sites, government agencies or other entities involved in heritage asset identification, preservation, management and related education and outreach.

Students are required to complete a minimum of 18 hours from a list of approved graduate courses. 9 hours are required courses. 9 hours are electives.

Admission Requirements

Applicants for this graduate certificate must meet the requirements for admission to the College of Graduate Studies at YSU.

COURSE	TITLE	S.H.
Required Courses	(Minimum 9 hours)	9
HIST 6942	Applied History	
HIST 6943	Practicum in Applied History	
HIST 6944	Applied History Internship	
Additional Course Director, one course m an allied discipline	s: Choose 3 (Minimum 9 hours) With the permission of the ay be substituted with another graduate-level course from History or	9
HIST 5806	American Architectural History 1	
HIST 5807	American Architectural History 2	
HIST 5810	Conservation of the Historic Built Environment	
HIST 6941	American Material Culture	
HIST 6955		
HIST 6956		
HIST 6940	Oral History	
HIST 6946	Historical Editing	
HIST 6957	Special Topics in Applied History	
Total Semester Ho	burs	18

With the approval of the Certificate Director, courses may be taken in any order. However, students are strongly advised to take HIST 6942 Applied History during their first semester if possible. Students should seek the advice of the Certificate Director every semester before registering for any courses.

Learning Outcome:

Students will demonstrate the ability to translate traditional historical scholarship into media meant primarily for non-academic audiences

Certificate in Data Analytics Department of Mathematics and Statistics

Dr. Thomas Wakefield 618 Lincoln Building (330) 941-1395 tpwakefield@ysu.edu

Certificate Description

This certificate is an interdisciplinary collaboration between the Colleges of Business, BCLASSE, and STEM. It gives students the opportunity to learn and apply skills necessary to analyze large data sets and use predictive analytics to gain insight into data. Interest in data analytics is growing and this certificate allows YSU to offer an option to students looking to gain knowledge and experience in this in-demand field.

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

Admission Requirements

Undergraduate degree with overall GPA of 2.7 or higher.

COURSE	TITLE	S.H.
DATX 5801	Data Management	3
DATX 5803	Data Visualization	3
DATX 5805	Predictive Modeling Algorithms	3
or CSCI 6951	Data Science and Machine Learning	

The pre-requisite for DATX courses is junior standing and GPA of 2.5 or higher.

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.

Certificate in Economics Lariccia School of Accounting and Finance

Dr. Jeremy Schwartz Williamson Hall 3382 (330) 941-3076 jtschwartz@ysu.edu

CERTIFICATE DESCRIPTION

This is a six-course certificate (18 semester hours) designed for high school teachers who wish to participate in the College Credit Plus program and teach principles of economics.

Admission Requirements

Prior to starting the program students must have taken one of the following courses:

COURSE	TITLE	S.H.
MATH 1552	Applied Mathematics for Management	4
MATH 1570	Applied Calculus 1	4
MATH 1571	Calculus 1	4

CERTIFICATE REQUIREMENTS

COURSE	TITLE	S.H.
ECON 6912	Microeconomic Theory	3
ECON 6922	Macroeconomic Theory	3
ECON 6939	The Economics of Financial Markets and Institutions	3
Three 3-hour courses at the 6900 or 5800 level (the 5800-level classes must be taken as a graduate student)		9
Total Semester Ho	urs	18

Students must pass ECON 6912, Microeconomic Theory, and ECON 6922, Macroeconomic Theory, with a grade of "B" or better prior to teaching ECON 2610, Principles 1: Microeconomics, or ECON 2630, Principles 2: Macroeconomics.

Learning Outcomes

Provide high school teachers in the College Credit Plus program and teach principles of economics.

1. Apply fundamental economic concepts, models, and theories to describe and predict economic phenomena

2. Evaluate economic concepts, models, and theories using quantitative and computational tools

Certificate in English Department of Languages

Dr. Lucas Hardy, Graduate Director 240 DeBartolo Hall 330-941-3420 Ihardy01@ysu.edu

Certificate Description

This is a six-course certificate (18 semester hours) specifically targeted at teachers in the College in High School program. It responds directly to the state's demand for training College in High School teachers and to YSU's recent scholarship program for such teachers.

Admission Requirements

Applicants for this graduate certificate must meet the requirements for admission to the College of Graduate Studies at YSU.

Certificate Requirements

	-	
COURSE	TITLE	S.H.
ENGL 6906	Teaching of Literature	3
ENGL 6907	Teaching of Writing	3
ENGL 6922	Twentieth-Century American	3
ENGL 6915	Early American Studies	3
or ENGL 6917	Nineteenth-Century American Studies	
Select two of the f	ollowing:	6
ENGL 6911	The Medieval World	
ENGL 6912	Sixteenth- and 17th-Century British Studies	
ENGL 6913	Shakespeare and Renaissance Drama	
ENGL 6914	Restoration and 18th-Century British Studies	
ENGL 6915	Early American Studies	

	ENGL 6916	Nineteenth-Century British Studies	
	ENGL 6917	Nineteenth-Century American Studies	
	ENGL 6919	Studies in Young Adult Literature	
	ENGL 6920	Twentieth-Century British Studies	
	ENGL 6923	Working Class Literature	
	ENGL 6935	Studies in Romanticism	
	ENGL 6963	Perspectives in Multicultural Studies	
	ENGL 6968	Studies in Literary Form	
	ENGL 6975	English Education Seminar	
	ENGL 6976	Studies in English Education	
Т	otal Semester H	ours	18

Fotal Semester Hours

Learning Outcomes

- 1. Certificate in English students will situate texts in the appropriate literary, historical, intellectual, and cultural contexts to promote dual-enrollment student learning
- 2. Certificate in English students will analyze and model how the production and reception of language, writing, and literature are influenced by plurality in form/genre, culture, and identity.
- 3. Certificate in English students will present and model ideas about literature and language in a manner appropriate for the dual-enrollment high school classroom.
- 4. Certificate in English students will demonstrate skill in teaching dualenrollment students how to write persuasively and analytically about literature and language.
- 5. Certificate in English students will demonstrate skill in teaching dualenrollment students how to write analytically and persuasively for multiple college disciplines.

Certificate in Environmental Studies

Department of Physics, Astronomy, Geology and Environmental Sciences

Dr. Felicia Armstrong Moser Hall 2080 330-941-1385 fparmstrong@ysu.edu

Certificate Description

This sequence of 15 semester hours is designed to meet the needs of students and working professionals preparing for leadership roles in environmental science or management. The graduate certificate is focused in two tracks, with specialization in risk management and industrial/institutional management. This program is especially useful for careers with:

- regulatory agencies,
- · industries seeking compliance with environmental regulations or focusing on environmental management systems,
- · research facilities, and
- · consulting firms providing state-of-the-art assessment, management, and remediation.

The program will also prepare the student to continue graduate studies leading to higher degrees.

Admission Requirements

Applicants for this graduate certificate must meet the requirements for admission to the College of Graduate Studies at YSU.

Undergraduate courses will not qualify for the certificate, but the following may be suggested for preparation for courses above:

COURSE	TITLE	S.H.
CHEM 3764	Chemical Toxicology	3

Certificate Requirements

To receive a certificate in environmental studies, all students must complete 15 semester hours of credit from coursework listed below. A grade point average of 3.0 or above must be achieved for all 15 semester hours of credit.

Risk Management Track

COURSE	TITLE	S.H.
Core courses (tal	ken by certificate candidates in both tracks)	
ENST 6900	Advanced Environmental Studies	3
ENST 6901	Sources of Contamination	3
Risk Managemer	nt Track	
ENST 6931	Ecological Risk Assessment	3
Select one of the	following:	3
AHLT 5807	Epidemiology	
BIOL 5806	Field Ecology	
BIOL 6996	Topics in Ecology	
CHEM 6941	Advanced Organic Chemistry 1	
ENST 5830	Toxicology and Risk Assessment	
Industrial/Insti	and the second	
	tutional Management Track	сЦ
COURSE	TITLE	S.H.
COURSE	•	
COURSE Core courses (tal	TITLE ken by certificate candidates in both tracks)	
COURSE Core courses (tal ENST 6900 ENST 6901	TITLE ken by certificate candidates in both tracks) Advanced Environmental Studies Sources of Contamination	3
COURSE Core courses (tal ENST 6900 ENST 6901	TITLE ken by certificate candidates in both tracks) Advanced Environmental Studies	3
COURSE Core courses (tal ENST 6900 ENST 6901 Industrial/Institu	TITLE ken by certificate candidates in both tracks) Advanced Environmental Studies Sources of Contamination tional Management Track	33333
COURSE Core courses (tal ENST 6900 ENST 6901 Industrial/Institu ENST 6920	TITLE ken by certificate candidates in both tracks) Advanced Environmental Studies Sources of Contamination tional Management Track Environmental Compliance Industry/Institutional Management for the Environmental Professional	33333
COURSE Core courses (tal ENST 6900 ENST 6901 Industrial/Institu ENST 6920 ENST 6921	TITLE ken by certificate candidates in both tracks) Advanced Environmental Studies Sources of Contamination tional Management Track Environmental Compliance Industry/Institutional Management for the Environmental Professional	3 3 3 3 3
COURSE Core courses (tal ENST 6900 ENST 6901 Industrial/Institu ENST 6920 ENST 6921 Select one of the	TITLE ken by certificate candidates in both tracks) Advanced Environmental Studies Sources of Contamination tional Management Track Environmental Compliance Industry/Institutional Management for the Environmental Professional following:	3 3 3 3 3
COURSE Core courses (tal ENST 6900 ENST 6901 Industrial/Institu ENST 6920 ENST 6921 Select one of the ENGR 6925	TITLE ken by certificate candidates in both tracks) Advanced Environmental Studies Sources of Contamination tional Management Track Environmental Compliance Industry/Institutional Management for the Environmental Professional following: Applied Environmental Management	333333

Learning Outcomes

The Risk Management track is designed to enable professionals in environmental science positions to:

- · Identify and assess potential sources of environmental risk in the public sector
- · Advise industrial partners in developing protocols for proper attentive measures
- · Enable the student to continue graduate studies leading to higher degrees

The Industrial/Management Track is designed to meet the needs of students and working professionals preparing for leadership roles in environmental science or management. The graduate certificate is focused in two tracks, with specialization in risk management and industrial/institutional management. This program is especially useful for careers with:

- regulatory agencies,
- · industries seeking compliance with environmental regulations or focusing on environmental management systems,
- · research facilities, and

· consulting firms providing state-of-the-art assessment, management, and remediation.

The program will also prepare the student to continue graduate studies leading to higher degrees.

Certificate in Health Care Management

Department of Graduate Studies in Health and Rehabilitation Sciences

Dr. Dan Van Dussen

(330) 941-2558

djvandussen@ysu.edu

Certificate Description

The health care management graduate certificate is a collaborative program between The Bitonte College of Health and Human Services and the Warren P. Williamson, Jr. College of Business Administration. The sequence of 18 semester hours is designed to meet the needs of students and working professionals preparing for leadership roles in health care management. The certificate consists of six semester hours of business tool courses and twelve semester hours of health care management courses.

Admission requirements

In addition to the minimum College of Graduate Studies admission requirements, applicants must complete the following undergraduate courses or their equivalent:

COURSE	TITLE	S.H.
Research Methodo	ology	
Statistics		
ACCT 2602	Financial Accounting	3
AHLT 4810	Management Skills for Health Professionals	3
OR		
MGT 3725	Fundamentals of Management	3

Students should complete any undergraduate deficiency coursework before completion of the third semester of graduate work and must complete it prior to enrolling in related graduate-level courses. Also, applicants must submit name and contact information for three references:

- · one from a faculty member,
- · one from an employer, and
- · one from another source, or
- two from faculty members and one from another source.

Regular admission requires a cumulative undergraduate grade point average of at least 3.0 (on a 4.0 scale).

Certificate Requirements

COURSE	TITLE	S.H.
Must complete at	least 6 hours from the following:	6
HHS 6989	Health Research Methods	
MGT 6941	Managing Organizational Talent	
MGT 6930	Managing and Leading in Organizations	
Both 6941 & 6930 Together		
Must complete all the following courses:		
HHS 6918	Program Planning and Evaluation	3

Total Semester Hours		18
HHS 6958	Health Services Issues	
HHS 6953	Health Behavior	
HHS 6949	Community Health Practice	
Must complete 3	semester hours of the following:	3
HHS 6960	Health Education and Promotion	3
HHS 6922	Planning and Fiscal Management	3

Total Semester Hours

Learning Outcomes:

The student will demonstrate skills to access and integrate important facts,concepts, principles, and theories in the field of management when developing solutions to problems.

Certificate in Health Informatics **Overview**

The Health Informatics track was designed for students in the Computer Science Information Systems (CSIS) interested in working in Health Care to earn a certificate which will help them gain employment in this field which has undergone significant advancement in recent years in the area of Health Information Systems. MHHS students will also have an opportunity to receive additional training in Computer Science Information Systems leading to a Health Informatics Certificate in addition to their MHHS Degree.

Admission Requirements

Admission to the MHHS program.

Certificate Requirements

COURSE	TITLE	S.H.
Complete 3 sememsters of the following:		3
HHS 6949	Community Health Practice	
HHS 6953	Health Behavior	
HHS 6958	Health Services Issues	
HHS 6962	Health Care Policy	
Complete 9 semes	ter hours of the following:	9
HHS 6930	Health Informatics	
or		
CSCI 6920	Theory and Practice of Information Systems	
HHS 6935	Clinical Informatics	
HHS 6945	Health Care System Analysis	
or		
CSCI 6951	Data Science and Machine Learning	
HHS 6955	Health Care Quality in the Electronic Health Record	
Complete 6 semes	ter hours of the following:	6
HHS 6900	Special Topics	
HHS 6922	Planning and Fiscal Management	
HHS 6918	Program Planning and Evaluation	
CSCI 6901	Principles of Computer Programming	
or		
CSCI 6971	Cloud Computing and Big Data	

Learning Objectives

- 1. To prepare future health informatics leaders who understand the complex interplay among the health informatics stakeholder communities,
- 2. To enhance the ability to use the inter-relationships among health information technology, the healthcare delivery and regulatory processes, and information management,\

- 3. To grow a set of leadership behaviors that emphasizes professional competence, moral and ethical performance,
- 4. To demonstrate professional and technical competence in health informatics,
- 5. To instill a dedication to the use of technology for the benefit of humanity,
- 6. To create a sensitivity to the impact that the use of technology has on the person, and
- 7. To build a desire for life-long professional learning and development in health informatics.

Certificate in Homeland Security Program Director

Dr. Christopher M. Bellas 1420 Cushwa Hall (330) 941-2167

cmbellas@ysu.edu

Overview

The Graduate Certificate in Homeland Security provides Criminal Justice Graduate Students at YSU the opportunity to gain a more in depth understanding of how to prepare and respond to disasters at the local, regional, national or international level. Students will also gain knowledge concerning the politics, policies and theoretical basis regarding Homeland Security issues.

Admission Requirements

Students must formally be admitted to the Graduate School at YSU, and in the Masters in Criminal Justice program (face to face or online) before the student can begin the coursework necessary to complete the Homeland Security Certificate.

Certificate Requirements

Students desiring to pursue the Certificate in Homeland Security must complete 12 hours from the following.

COURSE	TITLE	S.H.
PHLT 5810	Agents of Mass Casualty	3
PHLT 5812	Crisis Management in Public Health	3
CRJS 5840	Critical Incidents and Homeland Security	3
CRJS 5841	Terrorism and Countersurveillance	3
CRJS 6957	Readings in Criminal Justice	1-4
CRJS 6960	Program Planning and Evaluation	3
CRJS 6985	Grant Writing	3
CRJS 6990	Criminal Justice Public Policy Seminar	3

The Certificate in Homeland Security requires 12 semester hours from above. Applicants for this graduate certificate must meet the requirements for admission to the College of Graduate Studies at YSU. Not more than 9 semester hours in the thesis option or 12 semester hours in the non-thesis option of a student's total course work for the M.S. degree may be taken from course offerings below the 6900 level.

Learning Objectives

- 1. Evaluation: Students will demonstrate knowledge on how to evaluate programs, policies, theories, and research related to the issues involving Homeland Security.
- 2. Administration: Students will demonstrate knowledge on how to use key CJ concepts to administrate programs that deal with Homeland Security both domestic and international.

3. Research: Students will demonstrate knowledge on how to perform their own research related to investigating, preparing and responding to Homeland Security situations.

Certificate in Literature for Children and Young Adults

Department of Languages

Dr. Lucas Hardy, Graduate Director 240 DeBartolo Hall 330-941-3420 Ihardy01@ysu.edu

Certificate Description

This four-course certificate (12 semester hours total) is designed to increase students' knowledge of children's and young adult literature while helping them achieve certain career goals. For students who intend to pursue doctoral work, concentrated study in children's and young adult literature will help to prepare them to specialize in these fields at the doctoral level. For those who teach at the elementary, middle school, and high school levels, such study will enhance their teaching careers by increasing their knowledge of literature for young people and helping satisfy certain professional development requirements of local school districts. For prospective or practicing librarians, the certificate will provide further expertise in establishing and maintaining library collections for young readers. Depending upon course rotation, students may finish the certificate within one year.

Admission Requirements

To be eligible for the graduate certificate in literature for children and young adults, students need not have an undergraduate degree in English, but they must have a B.A. or B.S. degree and meet the requirements for admission to the College of Graduate Studies at YSU. Certificate courses must be completed with a GPA of at least 3.0.

Certificate Requirements

COURSE	TITLE	S.H.
ENGL 6918	Studies in Children's Literature	3
ENGL 6919	Studies in Young Adult Literature	3
ENGL 6927	Historical Survey of Literature for Young People	3
•	se from the following, if the topic relates to children's o ure, with premission of the certificate director:	or 3
ENGL 6906	Teaching of Literature	
ENGL 6918	Studies in Children's Literature (may be repeated with a different topic)	
ENGL 6919	Studies in Young Adult Literature (may be repeated with a different topic)	
ENGL 6975	English Education Seminar	
ENGL 6976	Studies in English Education	
ENGL 6990	Special Topics	
ENGL 6969	Writing the Youth Novel	
psychology, hist	y elect to take one course in a related discipline (e.g., ory, education, art) when content is appropriate, with ne certificate director.	

Total Semester Hours

Learning outcomes

The certificate program offers a master's-level education in literature for children and young adults to help you achieve your professional goals in education or library science, or your plans to pursue doctoral study.

Certificate in Mathematics Department of Mathematics and Statistics

Dr. G. Jay Kerns 620 Lincoln Building (330) 941-3310 gkerns@ysu.edu

Certificate Description

The Department of Mathematics and Statistics, responding to state requirements that College in High School mathematics teachers, adjunct faculty at colleges, and faculty at community colleges obtain at least 18 semester hours of mathematics at the graduate level, offers a Graduate Certificate in Mathematics. The certificate is offered both traditionally and in an online format. The certificate is an attractive option for recognizing those looking to improve their credentials and teach College in High School courses. In addition to teachers looking to strengthen their credentials and background in mathematics, the certificate is a viable option for students who seek to strengthen their mathematical background before pursuing graduate study in mathematically-intense disciplines such as economics and finance. The educational objectives of this additional option within the program are to strengthen the mathematical background and preparation of secondary mathematics educators who teach approved college-level mathematics courses in their high schools and to provide students a means to strengthen their graduate mathematical background without having to complete a graduate degree in mathematics.

Admission Requirements

The admission standards for the Graduate Certificate in Mathematics are the following:

- The minimum admission standards of the College of Graduate Studies.
- An undergraduate cumulative grade point average of at least 3.0 in all undergraduate mathematics and statistics courses.
- A completed sequence in standard calculus including multivariable calculus.

Certificate Requirements

The GCM requires 6 courses (18 semester hours) selected from our rotation of graduate course offerings in mathematics and statistics and completed with a 3.0 GPA. At least 12 of the hours of the certificate must be completed at the 6900-level. The student, in consultation with the Graduate Executive Committee, will submit a curricular plan for the certificate by deciding which mathematics and/or statistics graduate courses best meet his/her educational goals. Course substitutions must be approved by the Graduate Executive Committee within the Department of Mathematics and Statistics.

Learning Outcomes

Students who successfully complete this program should be able to:

- read and understand advanced mathematical definitions, theorems, and proofs;
- · communicate mathematics and produce well-written proofs;
- identify fundamental concepts of mathematics as applied to science and other areas of mathematics, and to interconnect the roles of pure and applied mathematics.

Certificate in Professional and Technical Writing

Department of Languages

240 DeBartolo Hall 330-941-3420 Ihardy01@ysu.edu

Certificate Description

This four-course certificate (12 semester hours) is designed to meet the needs of students preparing for careers as:

- technical writers and editors;
- · company news and information directors;
- or grant and proposal writers for schools, hospitals, nonprofit organizations, and fine and performing arts groups.

Frequency of course offerings allows most students to finish the certificate within four semesters.

Admission Requirements

To be eligible for the **Professional and Technical Writing** graduate certificate, students need not have an undergraduate degree in English, but they must have a B.A. or B.S. degree and meet the requirements for admission to the College of Graduate Studies at YSU.

Certificate Requirements

COURSE	TITLE	S.H.
Required Courses		
ENGL 6943	Public and Professional Writing	3
ENGL 6944	Document Design and Production	3
Select two courses	s from Group A or one course from each Group:	6
Group A		
ENGL 6945	Grant Writing	
ENGL 6949	Professional and Technical Editing	
ENGL 6953	Publications Issues and Management	
ENGL 6992	Professional Communication	
Group B		
ENGL 6950	Sociolinguistics	
ENGL 6958	English Grammar	
ENGL 6993	Discourse Theory	
Total Semester Ho	urs	12

Total Semester Hours

Although ENGL 6998 Professional Writing Internship does not count toward the 12 semester hour requirement for the certificate, students are strongly urged to take this course or seek equivalent professional experience.

Learning Outcomes

Learning Outcome 1: PPW students will WRITE documents to meet the demands, purpose, and interests of a specific client and audience, using relevant rhetorical strategies and concepts.

Learning Outcome 2: PPW students will DESIGN documents to meet the demands, purpose, and interests of a specific client and audience, drawing on principles of visual rhetoric.

Learning Outcome 3: PPW students will REFLECT on and REVISE their documents' writing and design using concrete criteria set by a specific client and audience.

Learning Outcome 4: PPW students will DELIVER ORAL PRESENTATIONS of their documents' writing and design using professionally designed visual aid.

Dr. Lucas Hardy, Graduate Director

Certificate in Teacher Leadership Certificate Coordinator

Dr. Jane Beese 4105 Beeghly Hall (330) 941-2236 jbeese@ysu.edu

To meet the needs of teachers interested in pursuing a Teacher Leader Endorsement, Youngstown State University now offers a new program specifically aligned to Ohio's new Teacher Leader Framework and standards. This twelve credit, four course program can be completed within a one year time frame. Organized in a fully online format, candidates can complete coursework while operating as working professionals. This program is designed for candidates who aspire to be formal or informal leaders in their school or district while remaining a classroom teacher.

The program is delivered in a fully online format (https://online.ysu.edu/ degrees/education/teacher-leader-endorsement/).

In order to apply for the Teacher Leader Endorsement Program at Youngstown State University, candidates must:

1. Hold a current teaching license

2. Have at least four years of teaching experience

3. Already have a masters degree or currently enrolled in a master program

3. Names and contact information for two references who can explain why the candidate will be successful in the program.

Teacher Leader Certificate Graduate Certificate (12 Semester Hours)

Course of Study: Teacher Leader Endorsement

Youngstown State University

Beeghly College of Education

Graduate Certificate (12 Semester Hours)

COURSE	TITLE	S.H.
EDAD 6901	Instructional Leadership Beyond the Classroom	3
EDAD 6906	Data-Coaching and Decision Making	3
EDAD 6903	Building Capacity of Adult Learners	3
EDAD 6905	Culturally Responsive Teaching and Learning	3

Learning Outcomes

- 1. Candidates will be able to apply the principles of effective leadership and teacher learning.
- 2. Candidates will be able to make data-based decisions and evidence-based practice.
- 3. Candidates will be able to model ongoing professional learning and improved practice within a learning community.
- 4. Candidates will be able to advocate for a shared vision and clear goals for their schools to drive initiatives.
- 5. Candidates will be able to create and build strategic relationships and partnerships to enhance student outcomes.
- 6. Candidates will be able to foster a positive and inclusive culture.

Certificate in Teaching English to Speakers of Other Languages (TESOL)

Department of Languages

Dr. Lucas Hardy, Graduate Director 240 DeBartolo Hall 330-941-3420 Ihardy01@ysu.edu

Certificate Description

This four-course sequence (12 semester hours) is valuable for anyone who wishes to gain more knowledge of second/foreign language learning. It is also useful as a springboard to further graduate work in the field. It is designed to meet the needs of:

- K-12 language arts instructors who want more information but not necessarily state endorsement;
- · writing instructors at two-year colleges; and
- students who would like to enter doctorate programs in applied linguistics, English as a second language, or second language acquisition.

Students gain an understanding of issues of language acquisition and language pedagogy.

Admission Requirements

To be eligible for the graduate certificate in the teaching of English to speakers of other languages, students need not have an undergraduate degree in English or linguistics but must have a B.A. or B.S. and meet requirements for admission to the College of Graduate Studies at YSU.

Certificate Requirements

Students who have not taken an introductory linguistics course at the undergraduate level will be expected to do extra reading to get an understanding of basic terms. The department's advanced linguistics course (ENGL 6955 Advanced Linguistics) may also serve to provide background. Students should see an advisor for the TESOL certificate program.

Students must complete the following four courses:

COURSE	TITLE	S.H.
ENGL 6950	Sociolinguistics	3
ENGL 6951	Language Acquisition	3
ENGL 6956	TESOL Methods	3
ENGL 6958	English Grammar	3
Total Semester Hours		12

Learning Outcomes

The Graduate TESOL Certificate prepares students to teach English to Speakers of Other Languages in overseas settings, in higher education intensive English programs, in community-based adult ESOL programs, and more (i.e., settings that **do not** require an Ohio K12 teaching license).

Using knowledge of language acquisition principles, the structures of the English language, sociolinguistics, and culturally-sustaining pedagogies, students will be able to:

 Plan and implement a variety of research- and standards-based lessons and culturally-sustaining instructional activities across modalities (reading, writing, listening, speaking, multiliteracies, digital integration) that meet the needs of students learning English as an Additional Language;

- 2. Use knowledge of students' languages, cultures, backgrounds, and experiences to plan activities that motivate their participation;
- 3. Design and use formative, classroom- and performance-based assessments to monitor student learning and direct instruction;
- Engage in self-assessment to identify areas of strength and needed improvement, respond appropriately to constructive feedback, and plan for professional development

Certificate in the Teaching of Literature

Department of English

Dr. Lucas Hardy, Graduate Director 240 DeBartolo Hall 330-941-3420 Ihardy01@ysu.edu

Certificate Description

This is a four-course certificate (12 semester hours) that will be valuable for teachers of literature at junior high schools, high schools, and two-year colleges. It would also be useful as a springboard to further graduate study in literature. This certificate would allow those teaching literature or interested in teaching literature a focus within the MA in English or a stand-alone foundation in the subject.

Admission Requirements

To be eligible for the graduate certificate in teaching of writing, students need not have an undergraduate degree in English but must have a B.A. or B.S. degree and meet requirements for admission to the College of Graduate Studies at YSU.

Certificate Requirements

COURSE	TITLE	S.H.
Required Courses	1	
ENGL 6906	Teaching of Literature	3
ENGL 6902	Literary Thought	3
Students must ta	ke one course from two of the following three areas:	6
British Literature		
ENGL 6911	The Medieval World	
ENGL 6912	Sixteenth- and 17th-Century British Studies	
ENGL 6913	Shakespeare and Renaissance Drama	
ENGL 6914	Restoration and 18th-Century British Studies	
ENGL 6916	Nineteenth-Century British Studies	
ENGL 6920	Twentieth-Century British Studies	
ENGL 6935	Studies in Romanticism	
American Literatu	ire	
ENGL 6915	Early American Studies	
ENGL 6917	Nineteenth-Century American Studies	
ENGL 6922	Twentieth-Century American	
ENGL 6923	Working Class Literature	
Multicultural Liter	rature	
ENGL 6963	Perspectives in Multicultural Studies	
Total Semester H	ours	12

Learning Outcomes

 Teaching of Literature Certificate students will demonstrate knowledge of the history of British, American, and/or world literary publication cultures, movements, and forms/genres.

- 2. Teaching of Literature Certificate students will demonstrate the use of a variety of interpretive strategies for analyzing multiple kinds of texts, including close reading, contextual interpretation, analysis of form and genre, and rhetorical analysis.
- 3. Teaching of Literature Certificate students will demonstrate the use of theories related to the representation of culture, race, class, gender, and sexuality to interpret literary texts.
- Teaching of Literature Certificate students will demonstrate the ability to participate in the professional life of the discipline as scholars, teachers, editors, and writers.

Certificate in Teaching of Writing Department of Languages

Dr. Lucas Hardy, Graduate Director 240 DeBartolo Hall 330-941-3420 Ihardy01@ysu.edu

Certificate Description

This four-course certificate (12 semester hours) is valuable as an enhancement for employment as a writing instructor and also as a springboard to further graduate work in the field. It is designed to meet the needs of K–12 language arts teachers; writing instructors at two-year colleges; and YSU graduate students who would like to enter doctorate programs in rhetoric and composition. Students gain understanding of issues in the field of rhetoric and composition, such as:

- current writing pedagogy,
- assessment of writing,
- language theory,
- language varieties,
- multicultural literacies,
- electronic literacies, and
- · teaching strategies incorporating electronic media.

Frequency of course offerings allows most students to finish the certificate in two to three semesters.

Admission Requirements

To be eligible for the graduate certificate in teaching of writing, students need not have an undergraduate degree in English but must have a B.A. or B.S. degree and meet requirements for admission to the College of Graduate Studies at YSU.

Certificate Requirements

COURSE	TITLE	S.H.
ENGL 6901	Methods of Composition Research	3
ENGL 6907	Teaching of Writing	3
Select one of the	following:	3
ENGL 6900	Methods of Literary Research	
ENGL 6906	Teaching of Literature	
ENGL 6943	Public and Professional Writing	
ENGL 6956	TESOL Methods	
ENGL 6976	Studies in English Education ¹	
Select one of the	following:	3
ENGL 6950	Sociolinguistics	
ENGL 6958	English Grammar	
ENGL 6993	Discourse Theory	
Tetel Ormersten II		10

Total Semester Hours

¹ If topic applied to rhetoric and composition.

Learning Outcomes

Learning Outcome 1: Teaching of Writing Certificate students will form an understanding of a range of historical and contemporary theories and methods for teaching writing and learn to incorporate those philosophies into the classroom.

Learning Outcome 2: Teaching of Writing Certificate students will learn, analyze, and practice using various research methods for studying academic and nonacademic writing to draw conclusions about research questions.

Learning Outcome 3: Teaching of Writing Certificate students will collect, analyze, synthesize, and present primary and secondary research results and will credit sources according to chosen style guides.

Learning Outcome 4: Teaching of Writing Certificate students will collaborate with peers and instructors to write, revise, and edit written and designed materials thoroughly and effectively.

Certificate in Working-Class Studies

Timothy Francisco, Certificate Director

DeBartolo Hall 216

(330) 941-3425

tfrancisco@ysu.edu (sllinkon@ysu.edu)

This four-course certificate (12 semester hours) is designed to provide students with an interdisciplinary overview of the history and political and cultural meanings of working-class life. Program emphasis is on concepts of class, work, and identity, as well as strategies from multiple disciplines for gaining insight into working-class culture. For graduate students and working professionals, this program will provide an in-depth look at local history, local working-class culture, and the lives and experiences of local working people. For educators at middle and high school levels, this program will enhance their teaching careers by increasing their knowledge about working-class culture, issues, and pedagogy while satisfying certain professional development requirements of local school districts. Frequency of course offerings allows most students to finish the certificate within one year.

Admission Requirements

Applicants for this graduate certificate must meet the requirements for admission to the College of Graduate Studies at YSU.

Certificate Requirements

Choose 4 courses (12 hours) from the options below:

COURSE	TITLE	S.H.
ENGL 6923	Working Class Literature	3
ECON 5822	Urban and Regional Economics	3
ECON 5831	Labor Markets and the Economics of Unions	3
ENGL 6923X	Working Class Literature XR	3
ENGL 6963	Perspectives in Multicultural Studies	3
ENGL 6990	Special Topics	3
HIST 6940	Oral History	3
HIST 6941	American Material Culture	3
HIST 6957	Special Topics in Applied History	1-6
HIST 6959	Museum Curation and Interpretation	4

Students may also petition to have one relevant topics course in English, history, or management count toward the certificate. Students may complete the certificate as a stand-alone program or in conjunction with a master's degree in American studies, business, English, historic preservation, or history. Students taking the certificate as part of a master's program may count two of the four certificate courses toward the master's degree. To complete the certificate, the remaining two courses must be taken as additional credits.

Learning Outcomes

Students will develop an understanding of and an appreciation for workingclass cultures across multiple disciplinary perspectives and recognize how the working class both shapes and reflects social, political, and economic realities.

Students will acquire an understanding of intersections of class with race, gender, place, ethnicity, and other forms of identity, and demonstrate the ability to think critically about the complexities and the opportunities of intersectional approaches for study and/or advocacy of working-class interests.

Students will understand the importance of place-based, community-centered, and public-facing research and scholarship to Working-Class Studies, and will learn how to incorporate these elements into research projects.

Educational Licensure Department of Teacher Education and Leadership Studies (TELS)

Dr. Jane Beese 4105 Beeghly Hall (330) 941-2236 jbeese@ysu.edu

Post-master's Licensure Requirements

Candidates for an Ohio administrative license must be enrolled in or have completed the M.S. in Education degree in Educational Administration. Prior to enrolling in licensure coursework they must provide an updated professional resume and documentation from a licensed principal, superintendent, or other administrator where they work attesting to their skills, knowledge, professionalism, and leadership potential and agreeing to provide supervision in accordance with the clinical policies and procedures for YSU's principal program.

Principal License (OHIO) (6 semester hours)

Elementary Principal License Grades PK-6

Middle School License Grades 4-9

Secondary Principal License Grades 5-12

The licensure coursework consists of four 1-credit clinical courses, in addition to a 2-credit course in Special Education Law. The clinical experience is designed to afford candidates the opportunity to apply the content knowledge from their course work and practice the skills necessary for effective leadership. Across the four courses, candidates observe and then carry out a range of administrative responsibilities including analyzing student performance, carrying out clinical supervision of teaching staff, writing a staff improvement plan, designing a HQ staff development program, creating a master schedule, participating in teacher hiring processes, administering student discipline, conducting school safety drills, and coordinating special education meetings and functions, among others. In addition, candidates design and implement an Integrated School Improvement Project addressing a real need in their school setting. Candidates and faculty participate in an interactive on-line clinical learning community spanning diverse and geographically dispersed clinical sites.

COURSE	TITLE	S.H.
EDAD 7019	Special Education Law and Policy	2
EDAD 7022A and 7	022B must equal 4 hours	4
EDAD 7022A	Clinical Experience: The Principalship-Elementary (E) Middle (M) Secondary (S)	
EDAD 7022B	Clinical Experience: The Principalship-Elementary (E) Middle (M) Secondary (S)	
Total Semester Hours		6

Total Semester Hours

Candidates must hold or qualify for a valid teacher certificate/license at the same level as the administrative license being sought. They must also have two years of successful teaching under a professional teaching license at the same level as the administrative license being sought. Before being recommended for licensure, candidates must have a passing score on the state-prescribed administrative licensure exam for the principalship. Individuals qualifying for licensure at the Elementary or Secondary level are also issued licensure at the Middle School level.

Administrative Specialist License in Curriculum, Instruction, and Professional Development

Master's degree in educational administration, plus 18 hours of course work from the following list, which must include EDAD 7040 Clinical Practice for the Administrative Specialist:

COURSE	TITLE	S.H.
TCED 6936	Curriculum, Assessment, and Instruction to Improve Learning	3
SPED 6900	Issues, Trends & Ethical, Legal and Professional Guidelines in Special Education	3
EDAD 7018	School Discipline and Student Support Services: Policies, Programs and Prevention Strategies	3
EDAD 6948	Data Driven School Improvement and Program Evaluation	3
EDAD 7040	Clinical Practice for the Administrative Specialist	3
EDAD 7019	Special Education Law and Policy	2

Or a Master's degree in curriculum at YSU, plus coursework as follows:

COURSE	TITLE	S.H.
EDAD 6915	Learning, Teaching, and Instructional Leadership	3
EDAD 6947	School Building Operations and Management	3
EDAD 6949	Legal and Ethical Issues in Public Administration	3
EDAD 6952	School Finance and Budget Planning Processes	3
EDAD 6954	Community Engagement and Collaborative Partnerships	3
EDAD 7020	Human Resource Leadership	3
EDAD 7022A	Clinical Experience: The Principalship-Elementary (E) Middle (M) Secondary (S)	2
EDAD 7022B	Clinical Experience: The Principalship-Elementary (E) Middle (M) Secondary (S)	2
EDAD 7018	School Discipline and Student Support Services: Policies, Programs and Prevention Strategies	3
EDAD 6948	Data Driven School Improvement and Program Evaluation	3
EDAD 7040	Clinical Practice for the Administrative Specialist (EDAD 7040 must be taken for 3 hours total.)	3

Candidates must qualify for/hold a valid professional teacher certificate/ license and have two years of successful teaching under a professional teaching certificate/license. In addition, candidates must have completed the prescribed number of hours and have an official score report indicating a passing score on the state prescribed administrative licensure examination required for the license.

Superintendent License (OHIO)

Candidates must hold an administrative certificate or license issued upon the recommendation of YSU or the equivalent thereof as evaluated by the Department of Teacher Education and Leadership Studies at YSU, complete the following course sequence, and meet any other Ohio State Department of Education requirements.

The licensure coursework consists of three 1-credit clinical courses, in addition to four 3-credit courses. This model shifts the leadership focus from the micro (school site) to the macro (school systems) level and familiarizes prospective superintendents with systems knowledge and perspective on leadership in areas from educational governance to human resource administration to technology and facilities.

COURSE	TITLE	S.H.
EDAD 7024	Collective Bargaining and Systems Issues in Human Resources Administration	3
EDAD 7025	Educational Governance: Advanced Law and Policy Seminar	3
EDAD 7026	Technology and Facilities for Learning Organizations	3
EDAD 7035	The Superintendency and Evolving Ways of Looking a Leadership	t 3
EDAD 7050A and 7	050B must equal 4 hours	4
Total Semester Ho	urs	16

PRINCIPAL CERTIFICATE K-12 (Pennsylvania)

Candidates must hold a Master's degree from an accredited program. The professional education program provides evidence that School Principal certification candidates demonstrate knowledge of and competence in working in the elementary and secondary public school settings, including completion of the 36 semester hours listed below, many of which are included in the typical master's degree in educational administration. They must also provide an official score report indicating:

· achieve a passing score on state licensure exam for principalship; and

· satisfy any other Pennsylvania Department of Education Requirements, nlus.

Completion of 36 s.h. below (to extent not already taken as part of a master's degree program):

COURSE	TITLE	S.H.
EDAD 6933	Educational Leadership and Organizational Change	3
EDAD 6915	Learning, Teaching, and Instructional Leadership	3
EDAD 6936	Culturally Responsive Leadership	3
EDAD 6947	School Building Operations and Management	3
EDAD 6948	Data Driven School Improvement and Program Evaluation	3
EDAD 6949	Legal and Ethical Issues in Public Administration	3
EDAD 6952	School Finance and Budget Planning Processes	3
EDAD 6954	Community Engagement and Collaborative Partnerships	3
Select one clinical being sought:	experience course as appropriate to the licensure level	l
EDAD 7018	School Discipline and Student Support Services: Policies, Programs and Prevention Strategies	3
EDAD 7019	Special Education Law and Policy	2
EDAD 7022A	Clinical Experience: The Principalship-Elementary (E) Middle (M) Secondary (S)	2

EDAD 7022B Clinical Experience: The Principalship-Elementary (E) Middle (M) Secondary (S)

The professional education program provides evidence that each certification candidate demonstrates knowledge and competencies that foster professionalism and ethical practices in school/community settings including:

- 1. Professional organizations, professional literature, resources and advocacy groups.
- Integrity and ethical behavior, professional conduct as stated in Pennsylvania's Code of Professional Practice and Conduct for Educators; and local, state, and federal laws and regulations.
- Communicating effectively (orally and in writing) with students, colleagues, faculty, families, paraprofessionals, related service personnel, outside agencies and the community.
- 4. Recognizing the professional responsibilities of administrators' and teachers' roles as collaborators, team members, advocates, and service coordinators.

Certification for the Pennsylvania Superintendent's Letter of Eligibility

Candidates must:

- · hold a Master's degree from an accredited program and principal's license;
- have six years of professional service in schools, three of which shall have been in supervisory or administrative positions;
- have an official score report indicating a passing score on state licensure exam for Superintendent;
- all other State of Pennsylvania Department of Education requirements must be met;
- plus completion of the 15 semester hours listed below, many of which may already have been completed as part of the candidate's master's degree in educational administration and principalship certification programs.

COURSE	TITLE	S.H.
EDAD 7024	Collective Bargaining and Systems Issues in Human Resources Administration	3
EDAD 7025	Educational Governance: Advanced Law and Policy Seminar	/ 3
EDAD 7026	Technology and Facilities for Learning Organizations	3
EDAD 7035	The Superintendency and Evolving Ways of Looking at Leadership	g 3
EDAD 7050	Clinical Experience: Superintendency	1

Post-master's Family Nurse Practitioner Certificate Program

Centofanti School of Nursing

Certificate Director/ FNP Director

Wendy M. Thomas, DNP, CNS, FNP 3313 Cushwa Hall (330) 941-2638 wmthomas@ysu.edu

Dr. Patricia Hoyson, Family Nurse Practitioner Coordinator

3112 Cushwa Hall

(330) 941-1440

plhoyson@ysu.edu

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Certificate Description

The online Post - Masters Family Nurse Practitioner Certificate Program at Youngstown State University is designed to prepare the Post-Masters prepared nurse with opportunities to build upon their current knowledge and obtain additional advanced practice knowledge and skill enabling them them to provide direct primary care across the lifespan. The Family Nurse Practitioner Certificate Program is not a degree program. This certificate program is designed to enhance the professional development of the masters prepared nurse by providing education and training that prepares them for a family nurse practitioner's role.

The program is delivered in a fully online format (https://online.ysu.edu/ degrees/nursing/msn/family-nurse-practitioner/).

Youngstown State University online nursing program must meet the standards of the state(s) in which we possess authority to provide education and may only admit students from states in which we have approval. Online nursing program students must complete the program in the state of Ohio, Pennsylvania, West Virginia, Michigan, or Florida.

Upon completion of the certificate, graduates are eligible to take the American Nurses Credentialing Center and/or the American Academy of Nurse Practitioners FNP certification examinations. Following national certification, graduates are also qualified to be recognized as a Family Nurse Practitioner and is granted prescriptive authority through the State Board of Nursing.

Advanced Standing Program (21 hours)

Applicants who are already have an MSN degree with nurse practitioner qualifications are automatically considered for advanced standing status. The advanced standing program permits students to complete all requirements of the Family Nurse Practitioner option in 21 hours. This unique program blends online coursework and clinical experiences, including a practicum consisting of 600 hours in a variety of primary care settings.

Admission Requirements

Official transcripts from all institutions previously attended

MSN degree with 3.0 undergraduate GPA

Valid, current unencumbered RN license in the state you will complete practicum hours

Minimum 1 year of recent practice as a registered nurse by admission start date

Complete graduate admissions application and pay \$45 non-refundable application fee

- 1. MSN degree from an accredited program
- 2. Regular admission requires a cumulative undergraduate grade point average of at least 3.0 (on a 4.0 scale) and verification of work experience
- 3. Minimum 1 year of recent practice as a registered nurse by admission start date
- 4. Official transcripts from all colleges/universities attended
- Verification of a current, unencumbered RN license and expiration date in the state in which the student is licensed and practices and will be completing practicum hours

Clinical Hours and Experience

Applicants will complete a Supplemental Employment Verification form as part of the application process. This is used to verify *recent clinical hours and experience.

*Recent clinical experience is defined as clinical RN work experience within 3 years of first practicum course.

· Current BLS certification, immunizations, drug screen and criminal background checks are maintained while in the program annually

The YSU online nursing programs must meet the standards of the state(s) in which authority is approved to provide education and may only admit students from those states. Online nursing students must complete the program in the state of Ohio, Pennsylvania, West Virginia, Michigan, or Florida.

Family Nurse Practitioner (FNP) Option Curriculum

COURSE	TITLE	S.H.
Core Courses		
NURS 6902	Advanced Pathophysiology	3
NURS 6903	Advanced Pharmacology	3
NURS 6904	Advanced Health Assessment	3
NURS 6917	Differential Diagnosis	3
NURS 6918	Advanced Diagnostics and Technologies	3
NURS 7003	Role Development in Advanced Practice	3
Speciality Course	S	
NURS 7045	Family Nurse Practitioner 1	3
NURS 7046	Family Nurse Practitioner 2	3
NURS 7047	Family Nurse Practitioner 3	3
NURS 7048	Family Nurse Practitioner 1 Practicum	3
NURS 7049	Family Nurse Practitioner 2 Practicum	3
NURS 7050	Family Nurse Practitioner 3 Practicum	3
NURS 7051	Family Nurse Practitioner 4 Practicum	1
Total Semester H	ours	37

Students will complete 600 hours of supervised clinical practice as part of this certificate option for national certification eligibility.

Advanced Standing Program (21 hours)

Applicants who are already have an MSN degree with nurse practitioner qualifications are automatically considered for advanced standing status. The advanced standing program permits students to complete all requirements of the Family Nurse Practitioner option in 21 hours. This unique program blends online coursework and clinical experiences, including a practicum consisting of 600 hours in a variety of primary care settings.

Courses include

COURSE	TITLE	S.H.
NURS 7045	Family Nurse Practitioner 1	3
NURS 7046	Family Nurse Practitioner 2	3
NURS 7047	Family Nurse Practitioner 3	3
NURS 7048	Family Nurse Practitioner 1 Practicum	3
NURS 7049	Family Nurse Practitioner 2 Practicum	3
NURS 7050	Family Nurse Practitioner 3 Practicum	3
NURS 7051	Family Nurse Practitioner 4 Practicum	1
Total Semester	Hours	19

Total Semester Hours

Centofanti School of Nursing MSN/Post-Master's Grade Requirements

Satisfactory academic progress at the graduate level is maintained by satisfying the following criteria:

· A degree-seeking graduate student must maintain a minimum grade point average of 3.0 (on a 4.0 scale). *Any required course grade of D or F must be repeated and passed with a grade of C or better.

- · A degree-seeking graduate student must successfully meet the requirements, including the time requirement, of all comprehensive examinations of the degree program.
- · A degree-seeking graduate student must complete with a passing grade any thesis requirements (or the equivalent) of the degree program.
- · A non-degree graduate student must maintain a minimum grade point average of 3.0 (on a 4.0 scale).
- *Grades of D and F carry no graduate credit but will be used to determine the student's grade point average. A student has the privilege of repeating a course once, but the repetition is treated merely as another course, along with the first, in calculating the student's grade point average.
- *Any required course grade of D or F must be repeated and passed with a grade of C or better. Students may not advance in the program until they have taken the failed course, passed with a grade of C or better and maintain a GPA of 3.0.

For degree programs requiring up to 39 semester hours for completion, a student may count no more than six semester hours of coursework with a grade of C toward the minimum graduation hour requirements. For students in programs requiring 40 semester hours or more for completion, no more than nine semester hours of coursework with a grade of C may count toward the minimum graduation hour requirement.

*Grade Policy - Graduate Nursing Option-specific courses

In the seven (7) FNP courses (NURS 7045, NURS 7046, NURS 7047, NURS 7048. NURS 7049. NURS 7050. NURS 7051), the student MUST earn a grade of B or A. If a student earns a C or lower grade in any of these courses, the course MUST be repeated. The student can only repeat the course once. If a grade of B or A is not earned on the second attempt, the student will not be permitted to progress in the Graduate Nursing program.

- · provide primary care to families and persons of all ages within the health care delivery system
- · incorporate a variety of theories from nursing and related fields into the nurse practitioner role
- · analyze social issues related to the health care delivery system and advanced nursing practice

Post-Master's Certificate in Adult-**Gerontology Acute Care Nurse** Practitioner

Centofanti School of Nursing

Certificate Director

Wendy M. Thomas, DNP, CNS, FNP 3313 Cushwa Hall (330) 941-2638 wmthomas@ysu.edu

Cynthia Shields, AG-ACNP Coordinator 2328 Cushwa Hall (330) 941-1345 cmshields@ysu.edu

Certificate Description

The online Post Master's Adult Gerontology - Acute Care Nurse Practitioner (AG-ACNP) Certificate program option is designed to prepare the post-master's prepared nurse with opportunities to build upon their current knowledge and obtain additional advanced practice knowledge and skill to enable them to provide direct acute care to adult and older adult individuals and families.

The program is delivered in a fully online format (https://online.ysu.edu/ degrees/nursing/msn/family-nurse-practitioner/). (https://online.ysu.edu/ degrees/nursing/post-masters-certificate/agacnp-program/)

Youngstown State University online nursing program must meet the standards of the state(s) in which we possess authority to provide education and may only admit students from states in which we have approval. Online nursing program students must complete the program in the state of Ohio, Pennsylvania, West Virginia, Michigan, or Florida.

Graduates of this program will be gualified and eligible to take the American Nurses Credentialing Center AG-ACNP certification examination. Following national certification, graduates are also qualified to be recognized as an Adult Gerontology - Acute Care Nurse Practitioner and is granted prescriptive authority through the State Board of Nursing.

Advanced Standing Program (18 hours)

Applicants who have already earned an MSN degree with nurse practitioner qualifications are automatically considered for advanced standing status. The advanced standing program permits students to complete all requirements of the Adult Gerontology - Acute Care Nurse Practitioner option in 18 hours. This unique program blends online coursework and clinical experiences, including a practicum consisting of 540 hours in a variety of acute care settings.

Admission Requirements

Official transcripts from all institutions previously attended

MSN degree with 3.0 undergraduate GPA

Valid, current unencumbered RN license in the state you will complete practicum hours

1 year of recent critical care experience

- 1. Complete graduate admissions application and pay \$45 non-refundable application fee
- 2. MSN degree from an accredited program
- 3. Regular admission requires a cumulative undergraduate grade point average of at least 3.0 (on a 4.0 scale) and verification of work experience
- 4. Minimum 1 year of *recent practice as a registered nurse by admission start date
- 5. Minimum 1 year of recent critical care experience is required (this can include emergency room, ICU or intermediate acute care experience) prior to registering for the first specialty course
- 6. Official transcripts from all colleges/universities attended
- 7. Verification of a current, unencumbered RN license and expiration date in the state in which the student is licensed and practices and will be completing practicum hours

Clinical Hours and Experience

Applicants will complete a Supplemental Employment Verification form as part of the application process. This is used to verify *recent clinical hours and experience.

*Recent clinical experience is defined as clinical RN work experience within 3 years of first practicum course.

- · Current BLS certification, immunizations, drug screen and criminal background checks are maintained while in the program annually
- · Current ACLS certification required prior to the start of clinical practicums

The YSU online nursing programs must meet the standards of the state(s) in which authority is approved to provide education and may only admit students from those states. Online nursing students must complete the program in the state of Ohio, Pennsylvania, West Virginia, Michigan, or Florida.

COURSE	TITLE	S.H.
NURS 6902	Advanced Pathophysiology	3
NURS 6903	Advanced Pharmacology (unless completed previously)	3
NURS 6904	Advanced Health Assessment (unless completed previously)	3
NURS 6917	Differential Diagnosis	3
NURS 6918	Advanced Diagnostics and Technologies	3
NURS 7003	Role Development in Advanced Practice	3
NURS 7037	Adult Gerontology Acute Care 1	3
NURS 7038	Adult Gerontology Acute Care 1 Practicum	3
NURS 7039	Adult Gerontology Acute Care 2	3
NURS 7040	Adult Gerontology Acute Care 2 Practicum	3
NURS 7041	Adult Gerontology Acute Care 3	3
NURS 7042	Adult Gerontology Acute Care 3 Practicum	3
Total Semester H	ours	36

Total Semester Hours

Advanced Standing Program (18 hours)

Applicants who have already earned an MSN degree with nurse practitioner qualifications are automatically considered for advanced standing status. The advanced standing program permits students to complete all requirements of the Adult Gerontology - Acute Care Nurse Practitioner option in 18 hours. This unique program blends online coursework and clinical experiences, including a practicum consisting of 540 hours in a variety of acute care settings.

COURSE	TITLE	S.H.
NURS 7037	Adult Gerontology Acute Care 1	3
NURS 7039	Adult Gerontology Acute Care 2	3
NURS 7041	Adult Gerontology Acute Care 3	3
NURS 7038	Adult Gerontology Acute Care 1 Practicum	3
NURS 7040	Adult Gerontology Acute Care 2 Practicum	3
NURS 7042	Adult Gerontology Acute Care 3 Practicum	3
Total Semester	Hours	18

Total Semester Hours

Centofanti School of Nursing MSN/Post-Master's Grade Requirements

Satisfactory academic progress at the graduate level is maintained by satisfying the following criteria:

- · A degree-seeking graduate student must maintain a minimum grade point average of 3.0 (on a 4.0 scale). *Any required course grade of D or F must be repeated and passed with a grade of C or better.
- · A degree-seeking graduate student must successfully meet the requirements, including the time requirement, of all comprehensive examinations of the degree program.
- · A degree-seeking graduate student must complete with a passing grade any thesis requirements (or the equivalent) of the degree program.
- · A non-degree graduate student must maintain a minimum grade point average of 3.0 (on a 4.0 scale).
- · *Grades of D and F carry no graduate credit but will be used to determine the student's grade point average. A student has the privilege of repeating a course once, but the repetition is treated merely as another course, along with the first, in calculating the student's grade point average.
- *Any required course grade of D or F must be repeated and passed with a grade of C or better. Students may not advance in the program until they have taken the failed course, passed with a grade of C or better and maintain a GPA of 3.0.

For degree programs requiring up to 39 semester hours for completion, a student may count no more than six semester hours of coursework with a grade of C toward the minimum graduation hour requirements. For students in programs requiring 40 semester hours or more for completion, no more than nine semester hours of coursework with a grade of C may count toward the minimum graduation hour requirement.

*Grade Policy - Graduate Nursing Option-specific courses

In the seven (7) FNP courses (NURS 7045, NURS 7046, NURS 7047, NURS 7048, NURS 7049, NURS 7050, NURS 7051), the student MUST earn a grade of B or A. If a student earns a C or lower grade in any of these courses, the course MUST be repeated. The student can only repeat the course once. If a grade of B or A is not earned on the second attempt, the student will not be permitted to progress in the Graduate Nursing program.

Learning Outcomes

- · Provide direct acute care to the adult and older adult population within the Health Care Delivery System.
- · Incorporate a variety of theories from nursing and related fields into the acute care nurse practitioner role.
- · Analyze social issues related to the Health Care Delivery systems and Advanced Nursing Practice.

Post-master's Certificate in Nursing Education

Centofanti School of Nursing

Wendy M. Thomas, DNP, CNS, FNP 3313 Cushwa Hall (330) 941-2638 wmthomas@ysu.edu

Certificate Description

Designed specifically for nurses who hold MSN degrees, the Nursing Education - Post-Master's Certificate online program provides the nurse with opportunities to further their education and develop and refine new skills that will enhance their professional development as nurse educators.

The nursing education post-master's certificate program is designed to enhance the professional development of master's prepared registered nurses by providing education and training that prepares them for nursing educator roles and teaching positions in academic and service settings. This certificate program helps prepare the student to sit for the National League for Nursing Certified Nurse Educator examination.

Complete graduate admissions application and pay \$45 non-refundable application fee.

Official transcripts from all institutions previously attended

MSN degree with 3.0 GPA

Valid, current unencumbered RN license in the state you will complete practicum hours

Minimum 1 year of recent practice as a registered nurse by admission start date

Complete graduate admissions application and pay \$45 non-refundable application fee

- 1. MSN degree from an accredited program
- 2. Regular admission requires a cumulative undergraduate grade point average of at least 3.0 (on a 4.0 scale) and verification of work experience
- 3. Minimum 1 year of *recent practice as a registered nurse by admission start date
- 4. Official transcripts from all colleges/universities attended

5. Verification of a current, unencumbered RN license and expiration date in the state in which the student is licensed and practices and will be completing practicum hours

Clinical Hours and Experience

Applicants will complete a Supplemental Employment Verification form as part of the application process. This is used to verify *recent clinical hours and experience.

*Recent clinical experience is defined as clinical RN work experience within 3 years of first practicum course.

· Current BLS certification, immunizations, drug screen and criminal background checks are maintained while in the program annually

The YSU online nursing programs must meet the standards of the state(s) in which authority is approved to provide education and may only admit students from those states. Online nursing students must complete the program in the state of Ohio, Pennsylvania, West Virginia, or Michigan.

Certificate Requirements

The Nursing Education Post- Master's Certificate Program consists of 15 credit hours semester hours. The curriculum is designed to prepare students to implement the nurse educator role in a variety of settings. Students will develop competencies in program and curriculum design, implementation, instructional methods, and evaluation methods for diverse populations in a variety of settings.

Students are provided an opportunity to synthesize learning and function in the roles of a nurse educator by completing required nurse educator practicums of 3 credit hours.

COURSE	TITLE	S.H.
NURS 7018	Nursing Curriculum Design	3
NURS 7019	Nursing Instructional Methods	3
NURS 7021	Nurse Educator Role	3
NURS 7020	Evaluation in Nursing Education	3
NURS 7022	Nurse Educator Practicum 1	1
NURS 7023	Nurse Educator Practicum 2	2
Total Semester	Hours	15

Total Semester Hours

Centofanti School of Nursing MSN/Post-**Master's Grade Requirements**

Satisfactory academic progress at the graduate level is maintained by satisfying the following criteria:

- · A degree-seeking graduate student must maintain a minimum grade point average of 3.0 (on a 4.0 scale). *Any required course grade of D or F must be repeated and passed with a grade of C or better.
- A degree-seeking graduate student must successfully meet the requirements, including the time requirement, of all comprehensive examinations of the degree program.
- · A degree-seeking graduate student must complete with a passing grade any thesis requirements (or the equivalent) of the degree program.
- · A non-degree graduate student must maintain a minimum grade point average of 3.0 (on a 4.0 scale).
- *Grades of D and F carry no graduate credit but will be used to determine the student's grade point average. A student has the privilege of repeating a course once, but the repetition is treated merely as another course, along with the first, in calculating the student's grade point average.
- *Any required course grade of D or F must be repeated and passed with a grade of C or better. Students may not advance in the program until

they have taken the failed course, passed with a grade of C or better and maintain a GPA of 3.0.

For degree programs requiring up to 39 semester hours for completion, a student may count no more than six semester hours of coursework with a grade of C toward the minimum graduation hour requirements. For students in programs requiring 40 semester hours or more for completion, no more than nine semester hours of coursework with a grade of C may count toward the minimum graduation hour requirement.

*Grade Policy - Graduate Nursing Option-specific courses

In the six (6) **Nursing Education courses** (NURS 7018, NURS 7019, NURS 7020, NURS 7021, NURS 7022, NURS 7023), the student MUST earn a grade of B or A. If a student earns a C or lower grade in any of these courses, the course MUST be repeated. The student can only repeat the course once. If a grade of B or A is not earned on the second attempt, the student will not be permitted to progress in the Graduate Nursing program.

Learning Outcomes

- practice in advanced nurse educator roles within Academic, Health Care Delivery and Community settings.
- incorporate a variety of theories from nursing and related fields into nursing practice and education roles.
- analyze social issues related to Health Care Delivery Systems and nursing education.

Financial Assistance

Graduate students may apply for assistantships and fellowships, on campus employment, as well as Federal Financial Aid (https://studentaid.gov/h/apply-for-aid/fafsa/). Scholarships (p. 156) are also available.

Assistantships

The assistantship program is predicated on the idea that graduate students, given an opportunity to assist the faculty, provide a service to the institution and also gain valuable experience through this work in association with the faculty. Appointments to assistantships are made by the dean of The College of Graduate Studies only upon recommendation by the student's academic department. In those instances, in which the student indicates acceptance of an assistantship award after April 15, the student may not accept another appointment without first obtaining formal release for this purpose.

Applications for assistantships must be accompanied or preceded by application for admission to the College of Graduate Studies. All applicants and current students with superior credentials including first-year international graduate students may apply for graduate assistantships.

Graduate assistants may be assigned to instructional, research, and/or other academic duties as determined by the department in which the assistant is appointed and as approved by the dean of The College of Graduate Studies.

Graduate Assistant (GA) A GA is normally assigned duties primarily focused on the conduct of research/scholarly activity. A GA may be assigned teaching duties, but should not be the instructor of record for a course. Appointment is typically for the Fall and Spring semesters of an academic year.

Graduate Research Assistant (GRA) A GRA is only assigned duties focused on the conduct of research/scholarly activity and will typically receive a twelvemonth appointment.

Graduate Assistant/Intern (GA/I) A GA/I is a special category of graduate assistant, designated as a graduate assistant/intern (GA/I), which provides opportunities for University offices or departments, community companies or agencies, or other appropriate external sponsors to involve graduate students as academic assistants/interns in "real life" experiences related to their fields of study. The department/agency of service will provide funding for a stipend

and fringe to the University. The University will pay the student through the normal stipend process. The GA/I will be expected to work in the internship work environment 20 hours per week.

Teaching Assistant (TA) A TA will only be assigned duties focused on instruction and may be the instructor of record for a one regularly scheduled lower division undergraduate class or classes.

Note: Additional academic services to the academic program in which the student is enrolled may be appropriate for all assistantship appointments.

A student appointed as a graduate assistant (GA, GRA, TA and GA/I) or fellow will be paid a stipend and fringe benefits that include:

- Remission of up to 36sh of instructional fees during the combined fall and spring semesters and up to 12sh for the summer term (for graduate courses required to complete a single degree program)
- · Remission of the parking permit fee.
- · Nonresident tuition surcharge
- · Music performance fees (if applicable)

For GA/I appointments the department/agency of service will fund the stipend and fringe. A stipend will be paid to the student through the normal stipend process for GA/I appointments.

Stipends are subject to federal, state and city taxes. The fringe benefit or a portion of the fringe benefit may also be subject to taxes. GAs and fellows can select, if they wish, to participate in Ohio Public Employees Retirement System (OPERS).

Assistantship/fellowship appointments require 20 hours per week for 16 weeks for each fall and spring semester (including exam week) and 14 weeks for the summer semester (for 12-month appointments) for duties to be assigned by the department chair. Typically the assistantship/fellowship schedule follows the YSU academic calendar. In some cases the schedule may need to be changed to accomplish the duties to be performed. In such cases, the department chairperson will provide written notice of the change to the student affected and to the Dean of Graduate Studies. Graduate assistants/fellows assigned to classroom or laboratory duties are under the direct supervision of a full-service faculty member who will retain full responsibility for the maintenance of high academic and pedagogical standards.

The Chair of the department will be responsible for assessing the oral proficiency in English. Students who do not achieve a satisfactory rating will not be permitted to teach, and will be assigned non-teaching duties (research, grading, etc.) International graduate students, who have been appointed as teaching assistants, including graduate assistants who are assisting with teaching duties, are required to demonstrate oral proficiency in English. The speaking subsection of a standardized test will be utilized in the assessment process. For a TA, a minimum of 23 on the TOEFL is considered satisfactory; a score of 7 is considered satisfactory on the IBT and for students completing Duolingo a review of the interview is required to assess oral proficiency.

Graduate students who are in provisional status because of undergraduate coursework deficiencies cannot be appointed as teaching assistants until the required coursework is completed. Such students can be considered for research appointments. Exceptions to this policy may be considered and must be reviewed and approved by the dean of the College of Graduate Studies.

To remain eligible for the assistantship, an appointee must discharge his or her duties satisfactorily and maintain good academic standing. An appointee must maintain enrollment of a minimum of six (6) semester hours of degreecredit coursework for each fall and spring semester - nine (9) semester hours is recommended. In addition, students appointed through the summer terms must also enroll in at least six (6) semester hours. With the advisor's approval, graduate coursework that is not part of the graduate assistant's degree program may be counted toward the minimum enrollment required. Approval to carry more than 18 semester hours or fewer than the minimum required hours in any semester/term may be granted by the dean of The College of Graduate Studies upon clear justification by the student's academic program director or advisor.

Graduate assistants shall not hold other full-time employment but may accept occasional or temporary employment outside the University during the term of the assistantship, subject to the approval of the department chair or the program director of the department. Other employment on the YSU campus requires the approval of the dean of The College of Graduate Studies.

Guidelines for Graduate Assistant Leave

Circumstances occasionally occur that prevent graduate assistants (including GAs, TAs, and GAIs) from performing the duties of their appointment. Consistent with Youngstown State University's effort to support all members of our community, these guidelines seek to reduce the professional and personal stresses that can develop when graduate assistants encounter extenuating circumstances that warrant a temporary absence from their assistantship duties. The purpose of these guidelines is to outline how instances of personal and/or family illness, injury, childbirth or adoption, and other agreed upon and valid reasons for absence should be addressed by the unit funding the assistantship. These guidelines are intended to ensure that the graduate assistant support be maintained to the extent possible during an approved absence. In the cases of foreseeable events, the graduate assistant should inform his/her direct assistantship supervisor as soon as the circumstances and dates of needed leave are known. For unforeseeable events, notification should be made as soon as possible once the need arises. It should be noted that leave requests may be jeopardized or denied for reasons including, but not limited to, multiple leave requests, unsatisfactory performance levels, evidence of dishonesty, and insufficient documentation. Furthermore, these guidelines pertain only to issues related to the individual as a graduate assistant. There are separate attendance policies for the individual as a graduate assistant at YSU.

Short-term graduate assistant absences may be requested for valid periods of absences which typically span less than two weeks in duration. In these instances, the graduate assistant should make the request to his/her direct assistantship supervisor as promptly as possible, so that coverage of duties during the requested short-term absence can be addressed. Reasonable requests for short-term absences can typically be approved with all graduate assistant benefits maintained. The graduate assistant should work with the direct assistantship supervisor and the department chair to ensure that the time can be made up in a reasonable manner through creative ways such as working up to an extra five hours per week, working over university breaks, etc. The graduate assistants, the direct assistantship supervisor, and the department chair should agree to this plan in writing through the Short Term/ Extended Leave Form (See Attached).

For needed absences from graduate assistant duties of longer than two weeks, a graduate assistant must formally request an extended leave. Longterm absences may be requested for a variety of valid reasons as previously noted. These types of requests should be reasonable and include written documentation related to the reason for absence (such as a letter from a medical doctor, legal documentation, etc.). The request for extended leave must be made to the chair of the department providing the assistantship in consultation with the direct assistantship supervisor. Whenever possible, the department chair should not reassign workload to another graduate assistant. Graduate assistants who are formally approved through the Short Term/

Extended Leave Form will be excused from their regular graduate assistant activities for the duration of their approved leave. Although tuition remission will continue during the extended absence, graduate assistants will no longer receive the monthly stipend for the duration of their approved leave. The graduate assistant's monthly stipend resume upon successful return to the graduate assistant position within the particular appointment period.

Should the graduate assistant require additional leave time beyond the original agreement, this must be formally approved by the department chair in consultation with the direct graduate assistant supervisor through the Short Term/Extended Leave Form. Should the graduate assistants be unable to return until after the original appointment ending date, there is no guarantee of

the availability of a continued graduate assistantship. However, the graduate student would be considered for future graduate assistant appointments in a manner consistent with all other graduate students.

Cushwa/Commercial Shearing Graduate Fellowships

Cushwa/Commercial Shearing Graduate Fellowships are available for selected outstanding graduate students in YSU's master's degree programs in Science, Technology, Engineering, and Mathematics (STEM). Upon successful completion of the program, Cushwa Fellows will be awarded a master's degree in their field of study. The Charles B. Cushwa, Jr./Commercial Shearing Inc. Graduate Student Scholarship/Fellowship Fund was established in 2003 to provide students the opportunity to pursue advanced degrees, get career experience, and offset some of the financial challenges of continuing their education. In addition, the community will benefit from these scholars interacting with local businesses and bringing the resources of the University into the local economy.

Fellows are expected to devote 20 hours per week for 16 weeks per semester (12 weeks in summer) to fellowship duties. They are assigned to a research or other appropriate work experience that is related to the academic program in which they are enrolled. Fellows are normally expected to complete at least one semester as a graduate intern at a company or industry site related to their degree program. Cushwa/Commercial Shearing Fellows must maintain enrollment in at least 18 semester hours of degree-credit coursework for the regular academic year (fall and spring), not fewer than nine semester hours of degree-credit coursework during each fall and spring semester, and not fewer than six semester hours in the summer. To remain eligible, fellows must discharge their duties satisfactorily and maintain good academic standing in their coursework. Appointments are made annually based on satisfactory performance.

The stipend is \$15,000 for the academic year and summer (three semesters). Fellows will be awarded funding for instructional fees and out of state surcharge. Other academic fees may be remitted.

Normally, the Cushwa/Commercial Shearing Fellow receives an appointment for two years, including summers. An application for a Cushwa Fellowship should be submitted with the initial application for admission to the College of Graduate Studies or as soon as the student is advised to do so by the graduate faculty advisor. As part of the application process, applicants must submit an official Graduate Record Examination (GRE) score report (regardless of whether or not the GRE is required for the student's graduate program). Applicants must have been awarded an undergraduate degree from a regionally accredited U.S. institution. Contact the College of Graduate Studies for the current year's deadline.

Doctoral Fellowships

Doctoral fellows not only provide a service to the institution but also gain valuable experience through their special association with the faculty. Doctoral fellows are assigned to a research, teaching, or other appropriate work experience that is related to their academic program.

Normally, the doctoral fellow receives an appointment for a period of one calendar year beginning with the fall semester. To remain eligible for a fellowship, fellows must discharge their duties satisfactorily and maintain good academic standing in their coursework. Good academic standing for graduate students is a cumulative grade point average of at least 3.0 in graduate-level courses.

A student appointed as a doctoral fellow will be paid a stipend and receive tuition remission. Tuition remission includes:

 Up to 36sh of instructional fees during the combined fall and spring semesters and up to 12sh for the summer term (for graduate courses required to complete a single degree program) Note: Summer tuition remission require renewal of the appointment.

· Nonresident tuition surcharge.

Ph.D. Fellowships

The appointee to the Ph.D. in Materials Science and Engineering or the Ph.D. in Health Sciences Doctoral Fellowship is expected to devote a minimum of twenty hours per week to fellowship duties.

Doctoral fellows are required to be full-time graduate students as defined in the *Graduate Catalog*. Prior approval to carry more than twelve credit hours or fewer than six credit hours in any one semester must be obtained from the department concerned and the dean of the College of Graduate Studies. When determining minimum course hours, degree credit coursework will include whatever courses are stipulated by the Ph.D. program coordinator to fulfill the requirements for the degree program.

Institutionally funded first-year doctoral fellowships carry a stipend of \$23,500 for one calendar year. Continuing Ph.D. students, and those funded from external grants, may be awarded at a higher level, dependent upon the recommendation of the advisor, approval of the STEM or BCHHS dean, and availability of funds.

Ed.D. Fellowship

The Ed.D. Fellowship in Educational Leadership is awarded to outstanding doctoral students contributing and studying in the area of education. The Ed.D. Fellowship provides recipients with an academic year service appointment with the expectation of a minimum of twenty hours per week devoted to fellowship duties.

Criteria:

- · Full-time doctoral status
- · Admitted to candidacy by date of application
- Outstanding scholarship
- Minimum 3.0 GPA

Doctoral fellows are required to be full-time graduate students as defined in the *Graduate Catalog.* Prior approval to carry more than twelve credit hours or fewer than nine credit hours in any one semester must be obtained from the department concerned and the dean of the College of Graduate Studies. When determining minimum course hours, degree credit coursework will include whatever courses are stipulated by the Ed.D. program coordinator to fulfill the requirements for the degree program.

Award:

The recipient will receive a fellowship stipend for the academic year in the amount of \$10,000. The recipient will also receive tuition remission. Tuition remission includes:

- Up to 36sh of instructional fees during the combined fall and spring semesters and up to 12sh for the summer term (for graduate courses required to complete a single degree program) Note: Summer tuition remission require renewal of the appointment.
- · Nonresident tuition surcharge.

Application and Selection Processes:

Submit letter of interest and letter of recommendation by April 30 for consideration for the following year. Along with a completed application (including scholarship statement), students are required to submit a CV/ resume, and a letter of recommendation from a current Youngstown State University faculty member. All materials must be received by the deadline.

Applications are reviewed by a committee comprised of faculty representing various ranks and disciplines. Recipients are selected by the Department Chair.

For further information on the Ed.D. Fellowship please contact Jane Beese at jbeese@ysu.edu

Financial Aid and Scholarships

Youngstown State University has a comprehensive program of financial assistance which includes assistantships/fellowships, 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.
- Youngstown State University Scholarship Search: An online search engine to locate and apply for YSU-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 a number of scholarships awarded through the YSU Foundation and its donors.

All YSU applicants for admission, or current students, seeking financial assistance through the Free Application for Federal Student Aid (FAFSA) should apply no later than February 1 for new students and February 15 for continuing students. Students interested in applying for institutional grants and scholarships should adhere to those individual deadlines as noted on their respective applications.

For maximum consideration, both new and continuing students are encouraged to meet priority deadlines in applying for financial aid.

On-Campus Student 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://ysu.edu/welcome-student-employment/) 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 February 1 for new students and February 15 for continuing students.

Scholarships

Graduate Scholarship (new students only)

Graduate scholarships are available from the College of Graduate Studies for new graduate students accepted into a YSU graduate degree program.

Students enrolled in some online programs are ineligible for the Graduate Scholarship (See the list of these online programs on the Scholarships (https://ysu.edu/academics/college-graduate-studies/graduate-scholarships/) page).

Criteria for the scholarship

Cumulative undergraduate GPA of 3.5 or above

Each scholarship is renewable for up to 6 semesters if the student completes a minimum of 6 semester hours of graduate courses each fall and spring semester.

The Graduate Scholarship is applied to the instructional fees only. Students receiving the College Credit Plus Instructor scholarship are ineligible for the Graduate Scholarship.

No scholarship application is required; however, this scholarship is competitive and will be distributed according to GPA until the allocation for each program is met. Students should apply for admission early as funds are limited. The award process begins in April for the following academic year.

The College of Graduate Studies supports the April 15th Resolution Regarding Graduate Scholars, Fellows, Trainees and Assistants of the Council of Graduate Schools. The resolution is available at: https://cgsnet.org/ resources/for-current-prospective-graduate-students/april-15-resolution/ (https://cgsnet.org/resources/for-current-prospective-graduate-students/ april-15-resolution/) (link is external).

Amount: \$500 - \$1,000 to be credited toward the instructional fee each fall and spring semester if renewal requirements are met

Renewable: Yes

Sandcastle Scholarship

Applicants must be admitted to the College of Graduate Studies and pursuing a graduate degree program. Scholarship is available for full- or part-time study. Provide no more than a 10-minute presentation (can be presented via audio or video recording) describing why the degree you are pursuing is important to you personally and how what you are learning will impact your community. Cumulative undergraduate GPA must be no less than 2.7 and no greater than 3.3 on a 4.0 scale. Awardee will be selected by a committee comprised of at least two graduate faculty members and one College of Graduate Studies staff member.

Amount: \$425 Awards Available:1 Deadline Date: Not Applicable

Dr. Eugene D. Scudder Graduate Student Teaching Scholarship

Dr. Eugene D. Scudder Graduate Student Teaching Scholarship is a cash award given to a chemistry graduate student for outstanding performance in teaching assignments. Students cannot apply for this scholarship.

Amount: \$100 Awards Available: 1 Deadline Date: Not Applicable Renewable: No Contact: Chemistry Department, 330-941-3664

Dr. Robert A. DiGiulio Scholarship

The Dr. Robert A. DiGiulio Scholarship is awarded to a graduate student in the Department of Counseling who has been accepted into the program. The recipient must demonstrate need and be a non-traditional female student over the age of 25 years. Student must have at least a 3.00 average in Departmental courses.

Amount: \$500 Awards Available: 1 Deadline Date: February 1 Renewable: Information not available Contact: Counseling Department, 330-941-3257

Gertrude Hendricks Family Life Scholarship

The Gertrude Hendricks Family Life Scholarship is available each year to a graduate student whose undergraduate major has afforded preparation for an effective contribution to the family life area. Application is by letter to the School of Graduate Studies and Research. The following information should be included: undergraduate major, degree, and year; other degree work, if any; current graduate program; career goal(s); a statement of how the Hendricks

scholarship will help the student to achieve his or her goal(s); and a statement of how the scholarship will prepare the student for "an effective contribution to the family life area."

Amount: Varies Awards Available: Varies Deadline Date: February 1 Renewable: Yes Contact: College of Graduate Studies, 330-941-3091

Doris Burdman Scholarship - Graduate

The Doris Burdman Scholarship - Graduate is awarded to a student enrolled in the Master of Social Work program who is maintaining a minimum 3.0 GPA. The recipient must have completed a minimum of 12 semester hours of graduate level social work courses by the semester the award is to be granted. The recipient must showcase a commitment and dedication to the social work field as demonstrated through completion of an essay.

Amount: \$2,500 Awards Available: 1 Deadline Date: February 1 Renewable: No Contact: Scholarship Committee Chairperson, Department of Social Work, 330-941-1598

Dr. James A. Reeder Graduate Scholarship

Dr. James A. Reeder Graduate Scholarship is awarded to a current chemistry graduate student who will be enrolled at YSU at least part-time during the next academic year. Students cannot apply for this scholarship.

Amount: Varies, minimum \$500 Awards Available: 1 Deadline Date: Not applicable Renewable: No Contact: Chemistry Department for more information

Earl E. Edgar Memorial Scholarship

The Earl E. Edgar Memorial Scholarship is awarded to a graduate student studying the humanities. Applicant must be enrolled in the MA program in American Studies, English, or History; have regular admission status; and have at least half of the degree program requirements completed at the time of application. Application is by letter to the College of Graduate Studies. Selection is based on academic excellence and financial need.

Amount: Varies Awards Available: Varies Deadline Date: February 1 Renewable: Yes Contact: College of Graduate Studies, 330-941-3091

ROTC Scholarship

Army ROTC is an elective curriculum you take along with your required college classes. It prepares you with the tools, training and experiences that will help you succeed in any competitive environment. Along with great leadership training, Army ROTC can pay for your college tuition, too. You will have a normal college student experience like everyone else on campus, but when you graduate, you will be an Officer in the Army. Recipients must pass a physical fitness test, be U.S. citizens, have a minimum 2.5 GPA and minimum ACT of 19 or SAT of 930.

Amount: Up to \$12,000 per school year or \$48,000 for 4 yrs Awards Available: Not applicable Deadline Date: Not applicable Renewable: Yes, must be full-time with 2.5 GPA Contact: Military Science Department at 330-941-3205

Martha K. Shuster Memorial Scholarships

Martha K. Shuster Memorial Scholarships are awarded in recognition of academic adchievement in memory of a former YSU employee and Women's Club president. Scholarships are available to one graduate student. Candidates must have completed one third of degree requirements and a minimum 3.5 GPA. Financial need may be considered and a short essay is required. More information can be found at the following website: www.ysu.edu/womensclub (http://www.ysu.edu/womensclub/).

Albert A. Miller III Scholarship

This scholarship was established in 2022 to honor Albeit A. Miller III by his wife, Rosalyn, and their children, Meredith, and Albert IV. Albert graduated from Youngstown State University in 1971 with a B.S. in Business. Albert began his 40-year career in sales at Commercial Metal Forming where he became General Manager of Sales. He valued the education he received while attending Youngstown State University. He realized the advantages of students having the opportunity to further their post undergraduate studies at this university. The intention of this scholarship is to support Youngstown State University graduate students as they fulfill their potential and advance their careers.

Eligibility:

Graduate student

- # Part-time or full-time student
- # Cumulative undergraduate GP A no less than 2. 7

Terms:

A one-year scholarship that can be renewable for an additional year through the application and selection process as long as above eligibility requirements continue to be met. This scholarship when combined with all other financial assistance will not exceed the cost of full tuition, books, and supplies. **Selection:**

Selection is to be made by the College of Graduate Studies and the Office of Financial Aid and Scholarships, in conjunction with the YSU Foundation.

Graduate Degrees Granted

Graduate Degrees Granted

Doctor of Education,

Doctor of Nursing Practice,

Doctor of Philosophy,

Doctor of Physical Therapy,

Educational Specialist,

Master of Arts,

Master of Athletic Training,

Master of Business Administration,

Master of Computing and Information Systems,

Master of Education in Intervention Services,

Master of Fine Arts,

Master of Health and Human Services,

Master of Music,

Master of Public Health,

Master of Respiratory Care,

Master of Science,

Master of Science in Education,

Master of Science in Engineering,

Master of Science in Nursing,

Master of Social Work

University Resources University Housing

Whether you are an out-of-town or local student, living on campus is a fun and exciting part of the college experience! YSU owns and operates four residence halls, a smaller graduate and family housing community, as well as the University Courtyards- our upper-class campus community. Within this housing portfolio, there's an option to meet the needs of any student, while all options support the development of life-long friendships, academic success and strengthen student connection to the YSU community.

There are a few primary features that distinctly set the University-managed housing options apart from other housing options:

- The supportive network our staffing structure provides students to flourish independently during their transition to college life
- Fully furnished residence halls and apartment options, located conveniently on campus
- Exclusive access to fun, social programs designed to foster friendships within the residential communities
- We bill directly to the student account, which means that students' financial aid packages are directly applied, students can take advantage of the University payment plan, and there's no third party to worry about paying monthly rent to
- We honor the Penguin Tuition Promise with our housing rates- your rate is "locked in" from your first year on for each of the housing options
- Our team includes University maintenance staff members who are able to ensure quick resolution of any maintenance issues daily
- Contracted janitorial groups that clean common areas and community bathrooms twice daily

More information about our options, rates, contract, amenities, and meal plans can be found on our website: housing.ysu.edu

THE RESIDENCE HALLS

The halls provide a more structured living environment for the initial transition out of the family home and into college life. Our team of full-time live-in professional staff, Graduate Assistants, and Resident Assistants work together to provide round-the-clock guidance for our communities to develop around the values of diversity and inclusion, wellness, and academics. Staff have regular conversations with residents regarding their overall goals for the semester, consistently 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.

There are clear procedures and expectations in place addressing community issues including noise, safety, guests, and security. Buildings feature security cameras in public areas, 24-hour staffed desks, and locking exterior doors that require specific access cards for all residents. 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 all within easy walking distance.

Once a student has been accepted to YSU, they can submit a housing application at housingapp.ysu.edu (https://ysu.edu/housing-and-residence-life/residence-hall-application/) Students make a one-time, non-refundable \$35.00 application fee, to access the application. At the conclusion of the application, students are asked to sign their contract and make a \$250 pre-payment. This prepayment will be added as a credit to a student's bill at the beginning of fall semester. Please note, a \$250 housing prepayment is not

required as part of the summer application process. As part of the application, students can self-select their building, room, and roommate, based on the application timeline.

About our halls

- Kilcawley House, located on University Plaza, is a traditional residence hall conveniently connected to the student union and just steps away from the academic buildings.
- Lyden House, located on Madison Avenue, is one of the larger, traditionalstyle residence halls, located in close proximity to the dining hall.
- **Cafaro House**, is the designated Honors College residential community. The hall is predominately suite-style in layout and features a satellite Honors office inside. Honors coursework is also taught inside this community that sits alongside the dining hall and the Lyden House community.
- Wick House located on Wick Avenue, is a small historic home that was converted into a residence hall. This community proudly houses the Cliffe College Living Learning Community.
- Weller House also located on Wick Avenue, is a small building with 16 efficiency apartments that are home to the graduate and family housing population.

UNIVERSITY COURTYARD APARTMENTS

Ready for more independence in your campus housing journey?

The University Courtyard Apartment community offers upper-class students an off-campus lifestyle with all the benefits of on-campus living. Located conveniently on the edge of campus, this upper-class apartment community is just steps away from academic buildings, dining options and the student union! The varying apartment styles, including 1, 2 and 4-bedroom apartment floorplans, allow students to get a taste of apartment living accompanied with the safety, community and social aspect you would find in any other campus residence hall.

Each apartment is equipped with an upgraded appliance package that includes a 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, and high-speed internet access.

Students who choose to live at the University Courtyards will sign a yearlong lease, which typically runs from mid-August to late July. The University Courtyard Apartment community is a home for upper-class students who love to be social and get involved in the YSU community.

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 mealtimes (breakfast, lunch, and dinner), while on some nights they also feature a "late-night" option.

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/).

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 Ave. and Wood St.

The staff consists of sworn full-time police officers and intermittent sworn police officers. All sworn police officers are trained and certified by the Ohio Peace Officer Training Academy and have full police powers.

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 the YSU Police speaking to students and employees about personal safety awareness.

The Youngstown State University Police Department has mutual aid agreements with the Youngstown City Police Department, the Mahoning County Sheriff's Department, 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.

The University Police Department is open 24 hours a day. The general business telephone number is (330) 941-3527. 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 to tell the call taker you 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 the YSU Police Department.

Campus Safety Statistics

For a detailed description of campus safety measures and Crime Report statistics, see the publication *Annual Campus Safety and Fire Report* available at the YSU Police website. 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.

Campus Crime Alerts, as well as other information regarding campus safety, can be viewed at https://ysu.edu/ysu-police (https://ysu.edu/ysu-police/).

Emergency Notification System

The University has an emergency notification system that instantly reaches 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 YSU Alert Notification System website https://ysu.edu/ysu-police/penguin-alert (https://ysu.edu/ysu-police/penguin-alert/) to receive emergency notifications. Parents and family of students may also sign up at the same website to receive alerts.

Student Security Service (SSS)

The YSU Student Security Service is sponsored by the YSU police department. The service provides a walking escort and a motorized cart service for individuals with mobility challenges. The service is provided free of charge to YSU staff, students, and visitors. Registration is required; operational hours and information can be found at http://ysu.edu/ysu-police/ysu-student-security-service (https://ysu.edu/ysu-police/ysu-student-security-service/).

Parking Services Motorists' Assistance Program

Parking Services offers on-campus help with jump starts and lockouts to anyone with a valid YSU parking permit. The MAP will also lend out lug wrenches, jack stands, and gas cans. To contact the MAP program and shuttle service, call (330) 941-3051 or stop at any staffed parking booth.

Accessible 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.

University/Community Outreach

The Office of Alumni Engagement

The Office of Alumni Engagement fosters lifelong relationships between Youngstown State University and graduates worldwide. Alumni chapters and affinity groups provide opportunities for connection. Alumni events provide opportunities for graduates to stay engaged, build relationships, and give back to their alma mater. Alumni can volunteer with Pete's Pride. Volunteers share their experiences and provide a warm welcome to prospective and current students. This area also celebrates milestones in the alumni journey.

The Office of Alumni Engagement promotes and strengthens relationships with all, while upholding academic traditions and university vision. This department provides comprehensive programs which promote involvement in and support of the university.

The Office of University Events

The Office of University Event 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. University Events provides comprehensive programs which promote involvement in and support of the university and also highlight the value of the university.

University Events creates, coordinates, and/or assists with university events on campus and in the community. University 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.

University Events is charged with planning and implementing major university events including commencement. The office is also assigned unique onetime events such as political and dignitary visits, presidential installations, groundbreaking ceremonies and news conferences. University 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 in the education they earned from YSU.

Posthumous Degrees and Certificates of Achievement

Decisions regarding the awarding of posthumous degrees or certificates of achievement to deceased students are managed on a case-by-case basis by the Dean of the academic college where the student was enrolled in coordination with the Office of the Provost. The Dean of Students will contact the Dean (or designee) of the deceased student's academic college to assure they are aware of the circumstances and request a decision regarding the awarding of a posthumous degree or certificate. If approved, official documentation will be forwarded to the Office of Records. The Dean of Students and Director of University Events will communicate as appropriate to determine how and when the designation will be awarded (i.e. via mail, private ceremony, University commencement, etc.).

Community Counseling Clinic

The Community Counseling Clinic (CCC) (https://ysu.edu/communitycounseling-clinic/community-counseling-clinic/) 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 by emailing communitycounselingclinic@ysu.edu. The CCC is located in Room 3101 in the Beeghly College of Education, which is at the corner of Fifth and Rayen avenues. Free parking is available. Additional information is available at the Community Counseling Clinic website.

Office of Community Engagement

The Office of Community Engagement (OCE) (https://ysu.edu/strategicplanning/community-engagement/) is dedicated to the collaboration and creation of community partnerships to positively impact the region. OCE serves as the centralized coordinating structure to enhance communication, connect organizations with the appropriate campus resources to advance collaboration requests, and collect all of the community-based experiences from students, faculty, and staff. Additionally, the OCE works with organizations to secure external funds to support meeting community needs and the people they serve. Led by experienced professionals, the OCE provides support and a variety of services to community organizations and departments across campus.

Please call (330) 941-3427 or email communityengagement@ysu.edu for more information.

THE OHIO SMALL BUSINESS DEVELOPMENT CENTER (SBDC) AND EXPORT ASSISTANCE NETWORK AT YOUNGSTOWN STATE UNIVERSITY and the APEX ACCELERATOR at YSU

Ohio APEX Accelerator at YSU

In partnership with the Ohio Department of Development and the U.S. Small Business Administration, Youngstown State University and the Williamson College of Business Administration, the <u>Ohio Small Business Development</u> <u>Center</u> provides business solutions and consulting for companies to increase revenues and profits, create jobs, develop new ideas, and grow business opportunities. The <u>SBDC Export Assistance Network</u> helps companies plan, compete, and succeed in today's business world with export and international trade consulting. The <u>Ohio APEX Accelerator</u> prepares local businesses to compete for government contracts by connecting companies with opportunities at the federal, state, and local levels. The APEX Accelerator is funded through the U. S. Department of Defense and the Ohio Department of Development, Youngstown State University, and the Williamson College of Business Administration. Working collaboratively to "Connect Businesses with Opportunities", the Ohio Small Business Development Center and Export Assistance Network, and the APEX Accelerator are all located in the Williamson College of Business Administration – Suite #1155, and can be reached at:

SBDC: 330.941.2140 / EAN: 330.941.2145 / APEX Accelerator: 330.941.1886

Office of the Registrar

The College for the Over 60 (https://ysu.edu/registrars-office/college-oversixty/) program is a state-mandated 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 classes on a space-available basis. Each state university or college shall permit any person who is sixty years of age or older and who has resided in the state for at least one year to attend its courses and classes without charging that person a tuition or matriculation fee, provided the attendance is on a noncredit basis, is in courses where classroom space is available, and is approved by the instructors of the courses involved. The university or college may require payment of special fees, including any laboratory fees, if the fees are required of all students taking a course. Each university or college shall issue rules for determining the availability of classroom space and may issue such other rules as it considers necessary to implement this section, including rules exempting from the requirements of this section courses or classes for which special course or training prerequisites apply, in which physical demands upon students are inappropriate for imposition upon persons sixty years of age or older, or in which the number of participating regular students is insufficient to cover the university's or college's course-related expenses. A university or college also may extend to persons attending its courses and classes under this section any other student rights or privileges it considers appropriate (see Ohio Revised Code 3345.27 (https://codes.ohio.gov/ohio-revised-code/ section-3345.27) for more information).

Telecommunication Services WYSU-FM, 88.5 MHZ

Youngstown State University owns and operates WYSU-FM (https://wysu.org/ listen/), a 50,000-watt radio station that serves the Northeast Ohio and Western Pennsylvania region with fine arts and news and information programming from its studios in Melnick 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 89.7 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

In partnership with Youngstown Area Goodwill Industries, WYSU-FM transmits the Youngstown Radio Reading Service, providing special educational programs for the sight-disabled on a multiplex basis using a sub-carrier frequency of 67 kilohertz.

Research at YSU

Youngstown State University is committed to fostering high quality, nationally competitive research to promote faculty and student development in support of the teaching mission of the University. The mission (https://ysu.edu/

academics/college-graduate-studies/mission-statement/) of the College of Graduate Studies is to prepare diverse and highly skilled professionals, leaders, collaborators and innovative thinkers through excellence in education, research and creative works. The Office of Research Services (https://ysu.edu/ office-research-services/) serves as the principal point of coordination for both internally- and externally-funded programs at Youngstown State University. These coordination efforts are directed at obtaining the resources necessary to mount and maintain scholarly and educational programs of excellence and, in some cases, to target specific areas for regional and/or national prominence.

Youngstown State University faculty members are heavily invested in scholarship on an individual basis. Graduate faculty research interests are listed for each degree program in the catalog and also individual faculty members' web pages accessible from departments/websites.

Excellence in research and scholarship by faculty and students is highlighted in our *New Frontiers* publication.

Center of Excellence in Materials Science and Engineering

The program, comprised of 22 faculty and staff from six departments in the College of Science, Technology, Engineering and Mathematics, is devoted to the preparation, advancement and development of a variety of materials for basic research, educational experiences and practical applications.

Advanced Manufacturing Research Center

The center will lead YSU efforts in the development and practice of advanced manufacturing technologies, including additive manufacturing, robotics, reverse engineering, digital metrology and hybrid manufacturing.

Williamson College of Business Administration Center of Excellence in International Business

The center capitalizes on and integrates the strong and varied WCBA international business activities already in place, including the Williamson Center for International Business and the Ohio Small Business Development Center/Export Assistance Network.

Center for Sports Medicine and Applied Biomechanics

Biomedical science and technology has grown dramatically over the last two decades and has become a major academic and industry research area. This center, along with a new minor program in Biomechanics and joint master's program in Biomedical Science, will serve to address these growing needs. Faculty in the College of STEM and in the Bitonte College of Health and Human Services have collaborated to build a state-of-the-art laboratory for medical science and biotechnological research.

Centofanti Center for Health and Welfare for Vulnerable Populations

The center is committed to serving the needs of vulnerable individuals impacted by debilitating illness, poverty, disability and/or discrimination throughout the Youngstown community. The center currently provides health and human service trainings to faculty, staff and community members. It will continue collaboration through the establishment of student-driven programs that improve the health and well-being of patients attending the Midlothian Free Health Clinic.

Institute For Applied Topology & Topological Structures

The Institute, located within the Department of Mathematics and Statistics, promotes, facilitates, and supports topological research, education, and application at the University, in the State of Ohio, and throughout the world, and helps implement the University's role as an Urban Research University. This mission includes the growing and strengthening the topology group at Youngstown State University and its alliance with other topologists in the United States and abroad, particularly with the topology groups at Slippery Rock University and other universities in the region. Toward that end, the Institute supports any activity that facilitates research and scholarly growth or funding for the topology group and its collaborating organizations.

Natural Gas & Water Resources Institute

The YSU Natural Gas and Water Resources Institute will provide bachelor's degree level courses in science and engineering that will lead to an academic minor in gas technologies and also will provide research opportunities for industry focusing on analysis of water used in the shale gas extraction process. Because of YSU's location in the Utica shale region of Ohio, this new Institute will meet the educational and research needs of this new and growing industry.

The Utica shale is a large rock formation thousands of feet below the surface spanning an area from eastern Ohio to Pennsylvania and across the Canadian border. Gas contained in the Utica shale is expected to become a dominant source of natural gas for the United States in this decade. A recent study showed that more than 200,000 jobs, including nearly 9,000 in professional and technical services, will be created or supported by 2015 due to exploration, leasing, drilling and pipeline construction for the Utica shale reserve.

Regional Economic Development Initiative (REDI)

The Regional Economic Development Initiative (REDI), located in the Office of Research 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.

During the fall of 2015, CURS transitioned to REDI and toward the role as "Navigator" in research-based, implementation-focused economic development support services for the Mahoning Valley. REDI's change in focus and mission will reflect organizational focus on a plan-implement structure known as design-build, a model often seen in the architecture and construction industries. This focus will enable REDI to serve as the "Navigator" in economic development implementation and support services throughout the Mahoning Valley. Economic development partners throughout the region have affirmed YSU REDI's "Navigator" role.

REDI coordinates and leads monthly Economic Action Group (EAG) meetings in support of economic development in the city of Youngstown and Mahoning Valley. The EAG convenes and engages representatives from a broad crosssection of industries and organizations throughout the Mahoning Valley. REDI provides leadership on federal, state, and private grant-writing initiatives, and also provides valuable GIS mapping and data services to a number of local and regional government, nonprofit, and social service agencies throughout the Mahoning Valley and beyond.

As a lead member of the National Additive Manufacturing Innovation institute (NAMII) located at the YBI, Youngstown State University is participating

in a national/regional network of industrial companies, government agencies/organizations, and universities and colleges focused on industry/ manufacturing support, workforce training, and applications research for additive manufacturing. YSU's main role will be workforce development and applied research as appropriate. The University is also the lead institution and fiscal agent for a recent U.S. Department of Energy Grant establishing the Tech Belt Innovation Center, a business incubator in Warren Ohio, focused on developing clean and advanced energy technologies for commercial application.

Mission Statement

The College of Graduate Studies prepares diverse and highly skilled professionals, leaders, collaborators and innovative thinkers through excellence in education, research and creative works.

Development and Organization

On March 28, 1967, the Trustees of The Youngstown University authorized the president and faculty of the University to begin developing graduate programs at the master's degree level, starting in the fall of 1968. In May 1967, the Faculty Senate of The Youngstown University authorized the development of master's degree programs in various academic departments of the University. At its first meeting on August 15, 1967, the Youngstown State University Board of Trustees established the office of the dean of the Graduate School and the general regulations governing the appointment of a graduate faculty. It also identified and authorized the initial graduate degree programs that were to be offered. These programs gained approval from the Ohio Department of Higher Education on December 15, 1967. Preliminary accreditation was given by the Higher Learning Commission in July 1968; continued accreditation was awarded in 1974, 1978, 1988, 1999, 2008 and 2018. The College of Graduate Studies is a member of the Council of Graduate Schools in the United States and the Midwestern Association of Graduate Schools.

The College of Graduate Studies is administered by a dean who serves as a member of the Graduate Council. The elected members of the Graduate Council consist of one representative from each college's graduate studies committee, one graduate student member, and one program director from each college. Standing committees of the Graduate Council are:

- Admission and Appeals
- Curriculum
- Exceptions

Graduate Student Representation

Within the first month of the fall semester, the Graduate Studies Committee of each college will ensure that a graduate student and an alternate from that college are elected to represent graduate student interests on the College Graduate Studies Committee. The five graduate student representatives to the five College Graduate Studies Committees also constitute the Graduate Student Advisory Council (GSAC).

Those eligible to be members of GSAC are full-time graduate students as defined in the graduate catalog, graduate assistants, or part-time students who have completed 12 or more hours of graduate credit, excluding transfer credit, before the fall semester in which the representatives are chosen.

The GSAC will choose from its own membership

- · a graduate student member of Graduate Council; and
- a graduate student member to serve on each of the following graduate committees:
 - Admission and Appeals
 - · Assistantship Allocation (committee convenes as needs arise.)
 - Curriculum

- · Exceptions
- · Policy (committee convenes as needs arise.)
- · Recruitment and Retention (committee convenes as needs arise.)

The GSAC may recommend members to serve on a Grievance Committee.

Graduate students serving on graduate committees shall be voting members of the committees on which they serve. Members of GSAC have the right to participate in graduate faculty meetings without voting. Vacancies in GSAC will be filled by Graduate Council. A vacancy will occur automatically if a student representative resigns his or her position or if he or she is not registered for courses carrying graduate credit. The GSAC may request Council to declare a vacancy if the student is delinquent in his or her duties. If there are no available students from a given college, the Council may fill the vacancy with a student from another college.

Admission Admission Procedure

To apply online for graduate admission, visit our website at www.ysu.edu/ gradcollege (http://www.ysu.edu/gradcollege/). Students are required to pay the admission fee by credit card or electronic check (only if applicable) as part of the process.

While unofficial transcripts will be accepted for the purpose of making admission decisions, official transcripts are required for admission to the College Graduate Studies. Unofficial transcripts must clearly state the name of the applicant, the name of the college/university and must be complete. Any transcripts that do not meet this criteria and/or appear to be tampered with will not be accepted. Registration beyond the initial term will not be permitted until official transcripts have been received.

An official transcript is required from each college or university attended, except YSU:

- · where a degree was earned, or is expected to be earned
- · where post-baccalaureate credit was earned
- · where any graduate level courses were attempted, or completed

Official transcripts must be sent directly from the institution to the College of Graduate Studies. If your official transcripts have been sent to YSU previously, we will check our database during initial application processing. Personal, opened or unofficial transcripts issued to the student or those delivered or sent by the applicant instead of the institution will not be accepted. Official transcripts issued to an applicant or student will only be accepted if they are still in the sealed envelope from the college or university.

Official academic credentials are required for admission to the College of Graduate Studies and should be sent whenever possible. For application review purposes, scanned copies of academic credentials will be accepted. Please scan and save all academic credentials as PDFs into one document for each institution attended. Upload each document to the Unofficial Transcript items within the Supplemental Items listing on your application account page. *Upon acceptance, the official documents must be sent to the College of Graduate Studies as soon as possible to avoid delay in your course registration.*

Applicants may be admitted as "Degree Pending" to the graduate college based on (6) six semesters of undergraduate study. Admission is contingent on students finishing the undergraduate degree and providing official transcripts or proof of degree indicating that the degree has been conferred by the end of their first term. Students will not be able to register for the following term until the proof of degree and final official transcripts have been received.

Study Abroad Credit and Transcripts

Original transcripts from the institution where study abroad courses were completed are not required unless the study abroad coursework falls into any of the following categories:

- · where a degree was earned, or is expected to be earned
- · where post-baccalaureate credit was earned
- · where any graduate level courses were attempted, or completed

Official academic credentials and test scores should be sent to:

Youngstown State University College of Graduate Studies 1 Tressel Way Youngstown, OH 44555

Applicants should provide all the information requested in the first submission of materials. Omission of information on the application form will necessitate requests for additional information and therefore delay application processing. International applicants should also see the International Student Admission section for additional requirements. As soon as possible after receipt of all application materials, students will be notified of the action taken on their application. Registration information will be provided upon admission to the College of Graduate Studies.

Once accepted for admission to the College of Graduate Studies, applicants may defer admission one time within one year at no cost. The one year will be from the term and year initially selected. Applicants will be provided instructions on how to defer after the request has been received by the College of Graduate Studies. Additional deferral of admission or deferral beyond one year will require applicants to apply for readmission and pay the current application fee.

*NON U.S. TRANSCRIPTS

- Any applicant (including U.S. citizens) who attended a non-U.S. educational institution must provide sealed certified/attested official transcripts to the College of Graduate Studies by the end of their first term (if admitted). While unofficial transcripts will be accepted for the purpose of making admission decisions, official transcripts are required for admission to the College Graduate Studies. Unofficial transcripts can be uploaded using the online application system. Unofficial transcripts must clearly state the name of the applicant, the name of the college/ university and must be complete. Any transcripts that do not meet this criteria and/or appear to be tampered with will not be accepted.
- Study Abroad Credit and Transcripts-Original transcripts from the institution where study abroad courses were completed are not required unless the study abroad coursework falls into any of the following categories:
 - · where a degree was earned, or is expected to be earned
 - where post-baccalaureate credit was earned
 - · where any graduate level courses were attempted, or completed
- Provisional Certificates will be accepted in lieu of Final Certificates for international applicants in South Asian, and African markets

Test Information

Some programs require submission of specific test results to the College of Graduate Studies as part of the admission procedure. The Graduate Record Examination is available at Sylvan Learning Center locations. ETS has also begun at home testing of the GRE; more information can be found at https:// www.ets.org/s/cv/gre/at-home/.. The Graduate Management Admission Test is available at Pearson VUE test centers; see GMAT website (http:// www.mba.com/us/) for more information. Arrangements for taking the Miller Analogies Test on campus may be made directly with the Testing Office in 154 Maag Library, (330) 941-3175. Test scores are valid for five years. The YSU institutional code is 1975.

Admission Requirements

Minimum requirements for admission to the College of Graduate Studies are the following:

- A bachelor's degree from a college or university certified by a regional accrediting agency (e.g., Higher Learning Commission) approved by the U.S. Department of Education. (A bachelor's degree from non-regionally accredited institutions may be considered acceptable for admission. These are reviewed by the Admission and Appeals Committee.)
- A cumulative grade point average in undergraduate work at the degree granting institution of at least 2.7 (on a 4.0 scale). At the request of applicant or program, the cumulative GPA can be calculated with the inclusion of the grades for all courses specified on transcripts from accredited institutions (or equivalent) up to the first bachelor's degree.
- Satisfactory preparation for the graduate program in which the student wishes to enroll as specified by the department of the major
- A test of written/spoken English, which the University reserves the right to request, of any entering graduate student whose primary language is not English. Additional requirements apply for international student admission
- Students having a cumulative undergraduate GPA below 2.7 (At the request of applicant or program, the cumulative GPA can be calculated with the inclusion of the grades for all courses specified on transcripts from accredited institutions (or equivalent) up to the first bachelor's degree), at the degree granting institution, must present a satisfactory score on the general test of the Graduate Record Exam, the Miller Analogies Test, or graduate-level subject specific exam as specified by the department of the major.
- Nine semester hours of graduate work at a 3.0 GPA from a regionally accredited institution may be substituted for the GRE/MAT requirement for regular admission status.

The applicant is reminded to check specific admission requirements of the program in which he or she wishes to enroll to determine if there are any additional requirements.

Additional Requirements for International Students

International applicants must complete an online application for admission and provide all materials required at least four months prior to the semester they wish to be considered for admission. In addition to the regular admission requirements, the following must also be submitted:

- For F-1 or J-1 Visa certification: evidence of financial support and sponsorship during the period of study at YSU, including documents of verification.
- YSU enrolls students in accordance with the policy of the United States Bureau of Citizenship and Immigration Services.

English Language Proficiency

- Test of English as a Foreign Language (TOEFL) score—A minimum score of 550 on the paper-based test, 213 on the computer-based test, or 79-80 on the Internet-based (IBT) Test of English as a Foreign Language by graduates of foreign universities who are nonnative English speakers. (Scores over two years old by the beginning of the term applicants wish to enter are not acceptable.) Arrange with the Educational Testing Service to have your official TOEFL score sent to our office.
- The College of Graduate Studies will accept the academic version of the IELTS (International English Language Testing System) as an alternative to the TOEFL exam for international students (A score of 6.5 on the IELTS test equates to a 550 on the paper-based TOEFL).
- The Duolingo English Test (DET) is also accepted as an alternative to the TOEFL exam for international students. Recommended DET Master's score is 105. Recommended DET Doctoral score is 115

- Proficiency may also be demonstrated by a letter of certification from the Youngstown State University English Language Institute (ELI) stating that the applicant has completed the program of study and is proficient in English at a level appropriate to pursue a graduate degree and present an English language thesis if one is necessary as a degree requirement.
- Prior to full admission to graduate study, students may be tested and placed in special English classes, if necessary, to ensure an adequate level of English proficiency. (Note: Evidence of proficiency is waived for applicants educated in English-speaking countries as defined in the YSU Undergraduate Catalog or for applicants holding U.S. Legal Permanent Residence for one year or for applicants who have successfully completed 24 semester hours of college-level coursework from an accredited Englishmedium college in the United States or another country where English is the official language.)
- ELI Guaranteed Admission--The application and supporting materials of an applicant whose language score is unknown, or less than that required for admission will be reviewed for admission by the appropriate academic program. Upon recommendation of the program director, academic dean and approval of the graduate dean, an offer of admission to the English Language Institute and admission to a graduate degree program will be made. The offer of conditional admission will be effective for one year. When appropriate, the admission letter will indicate that in addition to being admitted to the ELI program, the applicant will be admitted to the graduate degree program and the College of Graduate Studies upon satisfactory completion of the English Language Institute at Youngstown State University.

South Asian Credential Evaluation Overview

- For applicants graduating from an accredited post-secondary bachelor's program adhering to a 10-point scale, YSU will consider First Class with Honours / Distinction and First Class degrees as admissible.
- For applicants graduating from an accredited post-secondary bachelor's program adhering to a 10-point scale, YSU will review Second Class diplomas on a case-by-case basis. Second Class degree applicants will be admitted on a case-by-case basis, upon review of their transcripts.
- Applicants graduating from an accredited post-secondary bachelor's program adhering to a 10-point scale who present a Third / Pass Class diploma are not eligible for admission to YSU's graduate programs.

Types of Admission

Regular

Regular admission will be granted to students who satisfy the admission requirements for the graduate program in which they wish to enroll. Other categories are available as noted.

Provisional

Upon recommendation of the program director or chair, and the college dean, and subject to the approval of the dean of Graduate Studies, a student may be accepted with provisional admission if their undergraduate record shows slight deficiencies compared to the admission requirements of the program to which the student seeks entrance. Students who are admitted with provisional status because of undergraduate course deficiencies will be required to make up the deficiencies by taking the appropriate undergraduate courses. Students admitted in provisional status may have no more than 9 s.h. of undergraduate course deficiencies. Students who are admitted with provisional status because of low test score(s) or low cumulative undergraduate grade point averages will be reviewed by the program director and/or chair when nine semester hours of degree-credit coursework are completed. The program director and/or chair will change the student's status from provisional to regular if the deficiencies have been met and/or the student's record justifies such a change. The advisor will report the change to the Dean of Graduate Studies on the Action on Provisional Status form.

Non-degree

Non-degree status provides an opportunity for individuals who hold a baccalaureate or higher degree to enroll in graduate classes for professional or personal development, personal enrichment, or to explore the possibility of entering a graduate degree program without completion of the regular graduate admission process. Departments may require prior approval for nondegree student registration in departmental courses. Students should contact the department for approval to register before submitting an application.

Non-degree applicants must meet all requirements for admission to the College of Graduate Studies (minimum cumulative GPA of 2.7 at the undergraduate level, baccalaureate degree, and submission of all academic transcripts). Status as a non-degree student is not an admission to a College of Graduate Studies degree or certificate program. Non-degree students, including those seeking a graduate certificate, must complete a non-degree application online. Non-degree students that are not in a graduate certificate program must submit an application for every semester they plan on taking courses. Non-degree students are required to pay the regular application fee. If non-degree students subsequently decide to seek admission to a graduate program, no further application fees will be assessed, but all required credentials must be submitted.

Non-degree students are ineligible for many types of financial aid (including assistantships awarded by the College of Graduate Studies). Non-degree students may seek advisement from the chairperson or program director in the academic area in which they have been permitted to take courses.

Students may only complete nine semester hours as non-degree seeking students. A maximum of nine semester hours taken as a non-degree student may be applied toward a degree program if accepted by the department in which the student wishes to earn a degree and if the department's recommendation is approved by the dean of Graduate Studies. This transfer limit may not be appealed. Any additional coursework beyond nine semester hours in non-degree status will not carry credit toward a graduate degree. However, all graduate courses taken as part of a graduate certificate may be counted toward a degree program, if the student is subsequently accepted into the program and the certificate courses are applicable.

Students enrolled in certificate programs may not deviate from the courses required for the certificate. If they do, the additional courses will not carry credit toward a graduate degree. Non-degree students who are enrolled in or who complete certificate programs and subsequently decide to enroll in a graduate degree program must meet all admission criteria for the program in which admission is sought.

NOTE: Students who need to take more than nine semester hours in nondegree status (for licensure, certification, or to earn a graduate certificate, etc.), may reapply to the College of Graduate Studies for up to an additional nine semester hours in non-degree status.

Transient

Transient admission may be granted to a degree-seeking student who attends any accredited graduate school and who submits a Graduate Transient Student form, signed by the dean of the student's home graduate school, showing that he or she is a graduate student in good standing. The form to be used in such cases may be downloaded from the YSU College of Graduate Studies website (http://www.ysu.edu/sites/default/files/ RequestforTransient_Status_1016.pdf). Additionally, the student will need to complete a Non-Degree application on our website at www.ysu.edu/ gradcollege (http://www.ysu.edu/gradcollege). Under some circumstances, transient admission may be renewed for a second semester, but the graduate deans of both universities must approve the renewal. If a transient student later wishes to become a regular graduate student, he or she must be admitted to a degree program by following the usual admission procedures. An admitted transient student must meet all prerequisite requirements for any course taken at Youngstown State University.

Readmission

An applicant in good standing that is seeking readmission into the same program in the College of Graduate Studies shall not be required to submit new supplemental items (including standardized tests). New transcripts will only be required for schools not indicated on the previous application. If the student has not been enrolled in graduate study at YSU for 2 years or less, the student can be readmitted without departmental review. If the student has not been enrolled in graduate study for more than 2 years, the Program Director will be consulted and may decide to review the application and provide a readmission recommendation, or may request that the student be readmitted without department review.

A student in good standing that#s seeking readmission into a different program than the one to which they were last admitted,#will be required to submit all supplemental items required for admission to the new program. In cases where the GRE/MAT is a required application item, The GRE/MAT will be waived if#the student has successfully completed 9sh of graduate study with a GPA of 3.0 or above#from a regionally accredited institution – if such a waiver is requested by the Program Director.

Please note that to be considered for readmission, a student must have attended the YSU College of Graduate Studies. Students that were accepted, but never registered for courses are not considered for readmission and must apply for admission.

Workshops

Students who wish to take a workshop for graduate credit but who have not completed the regular College of Graduate Studies admission process will be permitted to register as non-degree students in the College of Graduate Studies. Graduate workshops are graded on an S/U (satisfactory/ unsatisfactory) basis.

Certain Youngstown State University workshop courses, upon approval of the graduate advisor, may later be applied to degree work if regular admission to the College of Graduate Studies is obtained and if those courses are part of the degree program. Workshop courses are those specifically designated as such in this catalog or by the Graduate Council.

Course Registration

Course registration for summer, fall, and spring semesters takes place multiple times throughout the year, and these dates are posted on the Office of the Registrar website. During the fall and spring semesters (in November and April), a two-week priority registration period is held for currently enrolled students to register for the subsequent semester; new transfer and readmitted students are also permitted to register during the priority period. An open registration period begins after the priority weeks and remains open through the last day to add a course for the semester. First time students, transient students, and participants in a college in high school program may register during the open period and typically register during a scheduled session or meeting with an advisor.

Course Status

Course:

The terms "course" and "class" are used interchangeably at the university and are defined as learning for credit by a qualified instructor with regular and substantive student-instructor interaction.

Class Hour:

The class hour is a weekly 50-minute class period and is the basic unit of instruction.

Semester Hour.

The term "semester hour" (s.h.) signifies one class hour a week carried for one full semester (or the equivalent in a part of term, summer term or flexiblyscheduled class). A *semester hour of credit* (also known as credit hour) 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 includes 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.

Enrollment Status

Current Student:

Enrollment is defined as consisting of three major components: admission to the university, course registration, and payment of all assessed tuition and fees. A currently enrolled undergraduate student is defined as one who is enrolled past the fourteenth day of the full-term or seventh day of an eight week or less part of term. Students who are considered current for a term, but do not register for the subsequent term, will still be notified about priority registration for two subsequent semesters. A student is no longer considered current or active if they have not enrolled for three consecutive semesters.

Full-Time Student:

A full-time undergraduate student is defined as one who is registered for at least 12 semester credit hours during a semester. Full-time enrollment for federal financial aid is always defined as 12 semester credit hours, including summer semester. Full-time tuition bulk rate is always defined as enrollment for 12 to 18 semester credit hours.

A full-time graduate student is defined as one who is registered for six or more semester credit hours during a semester. Graduate students who complete less than six hours per semester may lose eligibility for federal financial aid as a full-time student. Graduate students who wish to complete their program of study in a timely manner will likely need to enroll in nine or more hours per semester. Students are encouraged to discuss scheduling plans with their advisor. Assistantships/Fellowships and many scholarships require students to enroll in 9 or more semester hours during the Fall and Spring terms.

Enrollment Verification:

The National Student Clearinghouse serves as the university's authorized agent for enrollment and degree verification. The clearinghouse receives data electronically from YSU and dispenses the information electronically to requesting lending institutions, prospective employers, background investigation firms, and credit granting agencies. Students may also find that they need a letter from the university as proof of enrollment for things including but not limited to professional associations, licensure, insurance, and loans. The Office of the Registrar is responsible for verifying student enrollment status and can provide students with an enrollment verification letter. The office maintains both current and past records of enrollment, but cannot verify future enrollment. Students may request a letter in the Penguin Portal. The letter will be printed the next business day and will list the student's enrollment status (i.e., full-time) for the term requested, anticipated graduation date, and start and stop dates of the term. An enrollment verification letter does not include courses taken or grades attained; an official transcript should be requested to verify this type of information.

Maximum Schedule:

The semester hours of credit a student carries per term depends 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 semester credit hours per term. An undergraduate

student may register for a course load maximum of 20 semester credit hours per term. Students interested in taking 21 credit hours or more per term must seek approval from the dean of their college.

Process/Procedure

All course registration takes place online through the Penguin Portal and students may not attend a course unless they have registered for that course. Course registration is defined as adding a class, dropping a class, or completely withdrawing from all classes. Initial course registration and schedule adjustments must be completed before the last day to add a course or the last day to withdraw deadlines for the term/part of term. Detailed instructions on registration, including how to use waitlist, add/drop courses, change a grade mode or variable credit hours, or complete withdrawal are available on the Penguin Service Center website.

In general, students should follow the steps listed below to complete the registration process each semester.

- Run a program audit to review remaining course requirements and/or complete an academic advisement session, as necessary
- Review the schedule of classes in the Penguin Portal
- · Register for classes in the Penguin Portal
- Check financial aid requirements for eligibility and accept available aid in the Penguin Portal
- · View and pay charges in the Penguin Portal
- Review course schedule in the Penguin Portal prior to first day of classes
- Review and adhere to academic calendar deadlines on the Office of the Registrar's website

Check Registration Status:

There are various reasons a student could have a hold on their record preventing them from completing registration. Students should check their registration status in the Penguin Portal prior to registration. If there is a hold on the student's account, it will indicate if it will prevent registration and a phone number of where to call to resolve the issue will be listed in the description. If an academic advisement hold is listed, students should make an appointment with their assigned advisor as promptly as possible. Each academic department or college has a procedure for assigning a student to a faculty or staff advisor. For advisement requirements, please review the advisement section of the catalog.

Pay Attention to Registration Error Messages:

Some courses have prerequisites or requirements that students must meet in order to enroll in their courses. If a student receives an error message while registering for a course, note the message and contact the academic department of the course or the Penguin Service Center for assistance; students will find that they may need an override to be placed on their account before completing the registration process.

Closed Classes:

Departments set capacity limits to the number of students that can be accommodated in each section. During the registration period, many class sections become filled. These sections are labeled "FULL" in the schedule of classes, which means that no more students will be admitted to the course section. Students should use the waitlist option to obtain entry into the course; instructions on how to waitlist are available on the website (https:// ysu.edu/penguin-service-center/online-instructions/). Only the department chair offering the course can admit a student to a closed class or reopen a closed class.

Variable Credit Hour Classes:

Certain courses have variable credit hours which is a range of credits for which the course can be taken. Students wishing to register for such a course may do so 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 a variable credit hour course's hours. Students can adjust the credit hours of these courses through the Penguin Portal before this deadline.

Change of Registration:

It is recommended that students consult with their advisor prior to changing their schedules or completely withdrawing for the semester to review how those decisions may affect degree completion. Students may add, drop, or withdraw through the Penguin Portal according to the semester's published deadlines in the academic calendar (https://ysu.edu/registrars-office/ calendars/).

Exceptions

Undergraduates Registering for Conference Courses:

Conference course work is available only in exceptional cases and if the academic advisor considers conference work essential. Students must obtain the required override approval(s) and complete the course registration through the portal. Conference courses have the following restrictions:

- Permission is limited to seniors with a grade-point average of 3.00 or above (exceptions to this must be approved by the dean of the college in which the student is enrolled).
- 2. The course must be instructed by a full-time faculty member.
- 3. A brief description of the plan of procedure must be given by the full-time faculty member.
- 4. Student must have approval from the course's academic department and the dean of the college in which the course resides.

Undergraduates Registering for Graduate Level Courses:

Undergraduate students who do not have a bachelor's degree may request permission to take a 5800 level or higher graduate course(s) for graduate credit from the College of Graduate Studies. Before registering for the course(s), 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 student's advisor will complete a request form to be approved by the course instructor and College of Graduate Studies. Students must meet the following criteria in order to obtain permission to enroll:

- 1. Senior standing with un-recalculated grade point average of 2.7 or above
- 2. Graduate level course may not cause undergraduate schedule to exceed 15 semester credit hours
- Graduate level course may not be used for graduate credit until undergraduate student is admitted to the College of Graduate Studies and the credit is approved by the admitting program department
- 4. Graduate level course credit total may not exceed 9 semester credit hours

The credit earned may be used for graduate credit in a YSU graduate level program 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. The maximum amount of such credit that will be accepted at Youngstown State University is 9 credit hours. Graduate level courses do not count toward the undergraduate GPA, but will count toward the graduate GPA. Please see the Academic Honors (http://catalog.ysu.edu/undergraduate/general-information/academic-policies-procedures/academic-honors/) page of the catalog for more information on calculating GPA for graduation honors.

Undergraduates Registering for Over 20 Credit Hours in a Single Term:

Undergraduate students are limited to registering for a maximum of 20 semester credit hours each term. Students interested in registering for more than 20 semester credit hours must obtain approval from their academic college dean or their representative prior to registration. The academic college will complete an approval form and submit it to the Office of the Registrar for processing; once processed, the student's maximum hours will be adjusted and the student can register for the approved maximum beyond 20.

Undergraduates Obtaining Late Registration to a Course(s):

Obtaining admission to a course after the last day to add is only granted in certain circumstances. Students may petition to late register with the Penguin Service Center. If granted permission, the student must already be registered for other coursework, hold good academic standing status, have an account free from holds that prevent registration, and instructor approval.

Undergraduates Obtaining Late Withdrawal from a Course(s):

Course withdrawal after the last day to earn a "W" deadline or unofficial withdrawal is typically recorded as an "F" on the student's transcript. If that grade resulted from circumstances over which the student had no control, the student may file a petition for late withdrawal with the academic college of their major within one year from the time the grade in the course was recorded.

Undergraduates Obtaining Registration in a Closed Course(s):

Academic departments set limits to the number of students that can be accommodated in each course section. During the open registration period, many course sections become filled. These classes are called "Full" or "Closed" in the schedule of classes, which means that no more students will be admitted to them. If a student has an extenuating need to register for a closed course, the student should appeal to the chair of the academic department for the course; the department is the only authority that may permit a student to enter a closed course.

Undergraduate Student Cancellation of Registration:

A student's registration may be cancelled and withdrawn or administratively changed for any of the following reasons and are notified of the cancellation via email and/or letter.

- 1. Academic suspension from the previous term
- 2. Conditional Admission or Strong Start program dismissal
- 3. Disciplinary action via Student Conduct
- 4. Failure to meet admission or course prerequisite requirements
- 5. Registering for more hours than permitted
- 6. Failure to satisfy past-due financial obligations to the university
- 7. Course section is cancelled (due to insufficient class enrollment)

CONTACT FOR QUESTIONS/CONCERNS

Office: Penguin Service Center

Location: Meshel Hall

Website: https://ysu.edu/penguin-service-center (https://ysu.edu/penguinservice-center/) and https://ysu.edu/registrars-office (https://ysu.edu/ registrars-office/)

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 Post-Withdrawal Audit

If a student withdraws from courses for reasons beyond their control (e.g. military service, job transfer, shift change imposed by the employer that

creates a direct conflict with the class schedule, or death in the family¹), 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).

To receive "W" grades, students may withdraw from courses through the Penguin Portal (https://ysu.edu/penguin-portal/) until the deadline published on the Office of the Registrar's Academic Calendar (https:// ysu.edu/registrars-office/calendars/) each semester. Students seeking to withdraw from courses after the semester deadline should request approval from the Dean of their academic college by submitting a Petition for Late Withdrawal (https://ysu.edu/sites/default/files/academics/graduate_studies/ Petition_For_Late_Withdrawal.pdf). Alternatively, Medical Leave/Withdrawal (https://ysu.edu/student-affairs/medical-leavewithdrawal/) is available for students with a documented physical or mental health-related condition of a serious nature that requires them to leave the University mid-semester, after the last day to withdraw with a grade of "W." Students who may qualify for Medical Leave/Withdrawal should complete the application for medical withdrawal relative to their specific circumstance (i.e. Current Semester Medical Leave/Withdrawal (https://cm.maxient.com/reportingform.php? YoungstownStateUniv&layout_id=11) or Previous Semester/Retroactive Medical Withdrawal (https://cm.maxient.com/reportingform.php? YoungstownStateUniv&layout_id=20)). For questions, please contact the Office of the Dean of Students (https://ysu.edu/student-affairs/dean-ofstudents/) at dos@ysu.edu.

Once a student receives "W" grades, Applications for Involuntary Withdrawal may be considered only for semesters falling within the immediately preceding one (1) year time period (3 semesters). Appeals pertaining to semesters beyond this one (1) 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. Please address such correspondence to:

Fees and Charges Appeals Board c/o Office of University Bursar Youngstown State University 1 Tressel Way Youngstown, OH 44555

 For more information on immediate family members, visit Absence from Classes and Examinations (https://catalog.ysu.edu/undergraduate/general-information/academic-policiesprocedures/grading-system/)

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

Billing

Student accounts are billed each semester (bills will be issued mid-July for the Fall semester and mid-December for the Spring semester, and payments are due approximately the 1st 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://www.ysu.edu/viewmybill/) and log in to review statements, make online payments, enroll in payment plan, establish an authorized user, view holds, and select tax information.

Go to View My Bill (https://www.ysu.edu/viewmybill/) and log in to review 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 by check or debit card (no cash payments accepted):

*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, 1 Tressel Way, Youngstown, OH 44555 (check only, please do not mail cash). Please make checks payable to Youngstown State University.

You may pay online by e-check (no additional charge) or with Visa, MasterCard, Discover, or American Express. There is a 2.95% convenience fee assessed by the processor on all domestic credit card transactions and 4.25% on all international credit card transactions (minimum \$3.00 on both).

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/tuitionrefund-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 opting out in Blackboard. 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 instructions and additional information go to First Day Ready Electronic Materials Opt-Out Process (https://ysu.edu/university-bursar/ 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 accelerated online programs.

Students may designate another individual as an "authorized user(s)" by going to View My Bill (https://www.ysu.edu/viewmybill/) 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 online access to the student's tuition statements by logging on at Youngstown State University Student Account Suite (https:// epay.ysu.edu/C21820_tsa/web/login.jsp). Online payments can also be made via this website. E-mail notifications will be sent to both parties whenever a transaction is processed. Please note, if a payment is made by credit card and subsequently a refund is due, it will be issued by direct deposit directly to the student. The Youngstown State University e-mail system is the official means of communication, and all students and employees are responsible for information sent to them via their MyYSU account. It is the policy of this institution that:

- · all students, faculty, and staff have access to e-mail, and
- the university will send official communications via e-mail and electronic mailing lists

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 View My Bill (https://www.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., diplomas, registration, other University services), and occasionally transcripts 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 Penguin Service Center at (330) 941-6000, or in person, second floor of 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.

Graduate 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 graduate 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 covers costs associated with non-instructional services, including but not limited to the student union, intercollegiate athletics, campus recreation, performing artists and lecture programs, student organizations, student government and student counseling services.

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 SURCHARGE

Those students who are not legal residents of Ohio must pay a surcharge in addition to tuition.

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.

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 courses and programs.

DOCTOR OF NURSING PRACTICE - NURSE ANESTHESIA OPTION PROGRAM SURCHARGE

This fee is charged to Doctor of Nursing Practice nurse anesthesia graduate students to cover costs deemed necessary for specialize equipment and training pertinent to training in anesthesia. The partnership between Youngstown State University and St. Elizabeth Health Center School for Nurse Anesthetists, Inc. outlines this arrangement. The Board of Directors of the School sets this fee and it is approved by the board of trustees.

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.

GRADUATE CONSORTIAL PROGRAM MFA

The Northeastern Ohio Universities Master of Fine Arts in Creative Writing is offered by a consortium of four public universities of Northeast Ohio: the University of Akron, Cleveland State University, Kent State University, and Youngstown State University. The partnership program aligns with the missions of these institutions to offer graduate programs that meet clearly defined regional needs. The hourly tuition rate is calculated annually based on the highest general fee and the highest instructional fee among the institutions. The tuition, approved by the Board of Trustees at each participating institution, supports the administration and the instructional offerings of the program through a revenue sharing model.

GRADUATE CONSORTIAL PROGRAM MPH

The Consortium of Eastern Ohio Master of Public Health (CEOMPH) Program is a provided cooperatively by the University of Akron, Cleveland State University, Northeast Ohio Medical University, and Youngstown State University. Rates of current graduate students for each partner, the rates of other MPH programs and annual increases are considered each year. Tuition and fees are recommended annually by the Fiscal Issues Committee and approved by the Governing Counsel and the board of trustees at each participating institution. The tuition collected supports the administration and the instructional offerings of the program through a revenue sharing model.

GRADUATE WORKSHOPS SPECIAL TUITION RATES

The workshop rate is charged for workshop credit for courses taught off-site and by approved and qualified faculty who are paid by another agency.

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 preadmission advising and a wide array of student services unique to the international student population. This fee will support expenses related to preadmission 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 with the exception of online and distance learning programs.

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.

MASTER OF ACCOUNTANCY (MACC) PROGRAM FEE

The MACC Program Fee supports professional preparation activities, professional certification exams, engagement activities, and professional seminars for Master of Accountancy students.

MBA PROGRAM FEE

The MBA Program Fee supports the design and delivery of the MBA program and MBA activities and services that contribute to the success of the MBA 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 graduate 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 particular lot. Some facilities are restricted (e.g. for students only, for faculty and staff only, or overnight parking only). The current Driving and Parking Regulations pamphlet and parking lot map should be consulted. The fee is refundable only if the student returns the parking 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. This fee is non-refundable after the 100% tuition refund period and cannot be appealed.

A daily fee is charged anyone without a permit who wishes to park in facilities designated for cash business.

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.

PRECEPTOR TECHNOLOGY FEE

This is a charge for software used as an evaluation and document repository for clinical requirements and preceptor management.

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. Additional administrative fees may apply, please contact the Testing Office for additional 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 taking a minimum of one on campus class each semester. Students enrolled in an online program and taking classes strictly online will have the opportunity to purchase access to the Student Health Center for \$34 per semester. The mandatory fee of \$34 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
- · Continuation of allergy shots
- · Walk-In Care location for non-scheduled visits
- Wellness and Preventative Care
- Lab draw site

Mental health Services

- · Mental health, behavioral health and addiction issues addressed
- 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. Mental health, behavioral health, and addiction services are also available. Additional charges may apply for service and can include; labs, urine, x-ray, MMR and Varicella vaccines.

Students do not need to have health insurance to use the Center's services.

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.

YSU MERCY (WICK) PRIMARY CARE- STUDENT HEALTH CENTER FOR ON-LINE STUDENTS

Health Center Fee Payment

 Go to this webpage (https://epay.ysu.edu/C21820_ustores/web/ store_main.jsp?STOREID=78&SINGLESTORE=true&clearPreview=true) to make payment

For more information, visit Student Health Clinic (https://ysu.edu/wick-primary-care-ysu/).

HOUSING

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 on-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 FEE

A charge is levied on anyone whose check, ACH, or credit card payment is returned unpaid by the bank. Failure to pay billing of return check, ACH, and/or credit card payment within six days; and/or a second check, ACH, or credit card payment 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 Guest Services.

TECHNOLOGY LOANER EQUIPMENT FEE

A non-refundable fee that covers the cleaning, updates and maintenance of the YSU loaner devices.

THESIS-BINDING CHARGE

A charge is made for each copy of a master's thesis bound by the William F. Maag, Jr. Library.

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://ysu.edu/parking-services/rules-regulations/) for detailed information.

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, 1 Tressel Way, 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, Discover, or American Express. There is a 2.95% convenience fee assessed by the processor on all domestic credit card transactions and 4.25% on all international credit card transactions (minimum \$3.00 on both).

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 some online programs. See Tuition Rates (p. 173) for Online Programs that are not eligible for the payment plan.

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:

Length of Course	100% Refund	No Reduction of Charges
More than 8 weeks	Through 14th day of term	15th day of term and later
8 weeks or less	Through 7th day of term	8th day of term or later

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, 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 Post-Withdrawal Audit is submitted and approved by the Fees and Charges Appeal Board. All decisions made by this board are final and binding.

Graduate Tuition Rates Student Fees and Charges

Effective Fall 2024

(Instructional, General and Technology fees are required of all graduate students except where noted)

Although the graduate bulk-rate band is from 12-18 hours, graduate students are considered full-time for academic purposes at 6 hours and above.

For more information on Online Programs go to Online Programs (https://online.ysu.edu/).

TUITION INSTRUCTIONAL FEE

Graduate fultion		
1 to 11 credits	\$460.00	per credit hour
12 to 18 credits	\$5,520.00	per semester
Over 18 credits	\$460.00	per credit hour
Graduate Consortial Programs Tuition:		
Master of Fine Arts	\$621.00	per credit hour

Master of Public Health (distance learning program and MPH certificates)	\$698.00	per credit hour
Graduate Workshops Special Tuition Rates:		
In-State Participant	\$170.57	per credit hour
Non-Regional Participant	\$181.91	per credit hour
Doctoral Tuition		
1 to 11 credits	\$492.08	per credit hour
12 to 18 credits	\$5,904.96	per semester
Over 18 credits	\$492.08	per credit hour
Doctoral Consortial Programs Tuition:		
Doctor of Nursing Practice - Nurse Anesthesia Option (prior to Fall 2024)	\$2,000.00	per semester
Doctor of Nursing Practice - Nurse Anesthesia Option (New incomming Fall 2024)	\$4,000.00	per semester
Online Programs (not eligible for payment plan enrollment)		
Master of Business Administration	\$450.00	per credit hour
Master of Science in Education	\$415.00	per credit hour
Master of Science in Education Educational Administration with Principal Licensure	\$415.00	per credit hour
Master of Science in Nursing Family Nurse Practitioner	\$527.00	per credit hour
Master of Science in Nursing-Nursing Education	\$415.00	per credit hour
Master of Science in Nursing Adult- Gerontology Acute Care Nurse Practitioner	\$527.00	per credit hour
Post-Master's Adult- Gerontology Acute Care Nurse Practitioner Certificate	\$527.00	per credit hour
Post-Master's Family Nurse Practitioner Certificate	\$527.00	per credit hour
Advanced Standing Post- Master's Family Nurse Practitioner Certificate	\$527.00	per credit hour
Advanced Standing Post-Master's Adult- Gerontology Acute Care Nurse Practitioner Certificate	\$527.00	per credit hour
Educational Leadership Certificate	\$415.00	per credit hour
Doctor of Education, Education Leadership	\$415.00	per credit hour

GENERAL FEE

Note: General fee is not assessed for Distance Learning and Online Programs, Master of Fine Arts or Master of Public Health.

1 to 11 credits	\$104.99	per credit hour
12 to 18 credits	\$1,259.88	per semester
Over 18 credits	\$104.99	per credit hour

INFORMATION SERVICES FEE

Note: Only applies to Distance Learning programs.

1 to 11 credits	\$10.82	per credit hour
12 to 18 credits	\$129.84	per semester
Over 18 credits	\$10.82	per credit hour

NON-RESIDENT SURCHARGE

Those students who are not legal residents of Ohio must pay a surcharge in addition to tuition.

Note: Does not apply to Online Programs, Master of Fine Arts and Master of Public Health Programs but does apply to Distance Learning Programs.

1 to 11 credits	\$15.00	per credit hour
12 to 18 credits	\$180.00	per semester
Over 18 credits	\$15.00	per credit hour

NON-REGIONAL SERVICE AREA SURCHARGE

Note: Applies to Online Programs, Master of Fine Arts, Master of Public Health Programs but does not apply to Distance Learning Programs. Graduate students who received an undergraduate degree from an Ohio Institution are eligible but must submit documentation to receive the reduced rate.

1 to 11 credits	\$5.00	per credit hour
12 to 18 credits	\$60.00	per semester
Over 18 credits	\$5.00	per credit hour

HOUSING CHARGES

Housing Charges

		Cour
Room & Board (per academic year)	\$9,400.00	paid b
Residence Hall Application Fee (academic year and/or summer)	\$35.00	assig from l
Reservation /Pre-payment Fee	\$250.00	Annu
Single Room Upcharge	\$1,250.00 per semester	1 be
Weller House Apartments		2 be
One-bedroom apartment (academic year, room only)	\$6,750.00/AY or \$750.00/month (summer)	4 be Shor
Two-bedroom apartment (academic year, room only)	\$7,650.00/AY or \$850.00/month (summer)	Roo r Wee
Three-bedroom apartment (academic year, room only)	\$8,550.00/AY or \$950.00/month (summer)	Mon Mea
Graduate shared apartment (academic year, room only)	\$5,850.00/AY or \$650.00/month (summer)	50-B + \$1
*Multi-bedroom apartments are available only to students (U/G or Grad) with a child(ren). Single-		30-B + \$1 Sam
bedroom apartments available for Graduate student reservation.		10 c
*Academic year contract (charge per AY = 9 months (4 months in Fall and 5 months in Spring). Opportunity to extend into summer for 3 months at the monthly charge.		*Mu stayi
Expanded Housing Rate (over- occupied rooms)	\$4,850.00	

\$30.00
\$250.00
\$0.00
\$250.00
\$2,416.00 per 7-week term
See monthly Weller rates above
\$40.00
\$60.00
\$25.00
\$10.00
\$120.00 per night/desk ,
\$50.00
(students not in University housing) go to https://ycard.ysu.edu
\$895.00 per month
\$765.00 per month
\$670.00 per month
\$250.00
\$10,740.00
\$9,180.00
\$8,040.00
\$250.00
\$900.00
\$610.00
\$610.00 \$470.00

\$50.00 per credit

\$50.00 per credit

\$600.00

\$300.00

Master of Accountancy (MACC)

Credits in excess of bulk-rate

Master of Athletic Training - Onetime fee assessed first semester of

Bulk-rate 12 - 18 credits

program

Program Fee (per credit 1 - 11 credits)

VOLUNTARY BOARD PLAN (STUDENTS NOT IN UNIVERSITY HOUSING) PLEASE GO TO Y Card Portal (https://ycard.ysu.edu) OR CALL GUEST SERVICES 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.

rates charged per apartment instead of	f per bed.	program	
SPECIAL-PURPOSE FEES		MBA Program Fee (per credit 1-11 credits)	\$50.00 per credit
Art Usage Fee	\$29.00 per course	Bulk-rate 12-18 credits	\$600.00
College Level Examination Program	\$25.00	Credits in excess of bulk-rate	\$50.00
Test Fee (CLEP) College over 60 Registration fee	\$5.00	Master of Counseling Program Fee (per credit 1 - 11 credits)	\$10.00 per credit
Course Book, eBook, and instructional	Variable	Bulk-rate 12-18 credits)	\$120.00 per credit
supplies		Credits in excess of bulk-rate	\$10.00 per credit
Course Fees		Master of School Psychology Program	
Level 1	\$35.00 per course	Fee (per credit 1 - 11 credits)	
Level 2	\$50.00 per course	Bulk-rate 12-18 credits	\$120.00
Level 3	\$65.00 per course	Credits in excess of bulk-rate	\$10.00
Level 4	\$300.00 per course	MAT Test	\$90.00
Level 7	\$20.00 per course	NCAA Permissible Expenses	Variable
Level 8	\$85.00 per course	Ohio Attorney General Payment/	Variable
Level 9	\$25.00 per course	Collection Fee	
Level 10	\$200.00 per course	Parking - see below	
Level 11 (cooperative charge)	\$350.00 per course	Peace Officer Training Academy Fee	\$300.00 per semester
Level 12	\$300.00 per course	Performance Music Fee	\$75.00 per credit
Level 13	\$100.00 per course	Physical Therapy Doctoral Acceptance	\$500.00
CPCE Test Fee	\$10.00	Deposit	64.00 l'i
Credit by Examination ¹	\$20.00 per credit hour	Preceptor Technology Fee	\$4.00 per credit
Deferred Payment fee (employer paid	\$50.00	Proficiency Examination ²	\$45.00 per course
only)		Student Locker Rental	\$25.00 per year
Equipment, Materials & Damage Replacement Fee	Replacement value	Study Abroad Fee - Faculty Led Study Abroad Fee - Individual	Variable - based on actual travel costs \$75.00
Federal Background Check	\$28.00	Web-Based Course Fee	\$100.00 per course
Graduate Accelerated Program Fee (per course)	\$50.00	-	on the successful completion of a test
Graduate Student Application Fee - Domestic	\$45.00	 administered by an academic department at YSU. The course title appear 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 transcript. 	
Graduate Student Application Fee - International	\$75.00		
Graduation Fee	\$65.00		
Graduation Fee Late Application (after 3rd wk. of term)	\$38.50	SERVICE CHARGES	
Health Center Fee	\$34.00 per semester	Check Replacement Fee	\$25.00
Installment Payment Plan Enrollment	\$50.00 per semester maximum	Child Preschool Laboratory Fee	\$150.00 per semester
Fee		Computer-Based Placement Re-Test	\$20.00 per test
Internal Revenue Service/1098T penalty for incorrect name/SSN match	\$100.00	Credit Card Convenience Fee (student accounts only)	
International Graduate Student	\$45.00	Duplicate Diploma Fee	\$40.00
Credential Evaluation		Finger Printing Fee	\$37.00 per occurrence
International Student Activities Fee	Variable	Human Performance and Exercise	Variable to cover cost in that course
International Student Health Insurance	e pass-thru charge, set by Ins. Carrier- Variable	Science Activity PC Data Recovery Service Fee	\$100.00 per occurrence
International Student Program Fee	\$75.00 per semester	PC Remediation Service Fee (if 3 or	\$75.00
(not assessed to online and distance	or 0.00 per semester	more occurrences per academic year)	
learning programs)		more occurrences per academic year) Photo I.D. Replacement Charge	\$25.00
learning programs) International Student Storage Fee	\$5.00		\$25.00 \$38.00 per semester
learning programs) International Student Storage Fee International Student Transportation		Photo I.D. Replacement Charge	\$38.00 per semester
learning programs) International Student Storage Fee	\$5.00	Photo I.D. Replacement Charge Reading Tutoring Fee	\$38.00 per semester

Student Health Insurance	Go To: https://ysu.edu/wick-primary- care-ysu (https://ysu.edu/wick- primary-care-ysu/)
Technology Loaner Equipment Fee	\$50.00 per semester
Thesis Binding	\$25.00
Transcript Fee	\$6.00
Transcript Rush Fee (same day processing, US mail or in person)	\$12.00
Transcript Rush Fee (overnight express)	\$35.00
PARKING	
Control Card Replacement	\$5.00
Parking per day without permit	\$5.00
Parking per week without permit	\$18.00
Parking Permit (commuter) – Students, Fall & Spring - Optional	\$45.00
Parking Permit (overnight) – Students Fall & Spring - Optional	, \$90.00
Parking Violations/Fines:	
Class 1 – Minor violations	
1st offense	\$25.00
2nd offense	\$30.00
3rd offense	\$35.00
Class 2 – Major violations	\$100.00
Class 3 – Legal violations	\$250.00

For more information go to Parking Rules & Regulations (https://ysu.edu/ parking-services/rules-regulations/).

MAGG LIBRARY & CURRICULUM RESOURCE CENTER FINES & FEES

Overdue charges and loan periods differ by type of materials:

Library Material Replacement Fee	Market Value
Library Study Carrel Rental	\$25.00
OhioLink Material Replacement Fee	\$110.00
Overdue Closed Reserve Material Hourly Rental (per hour)	\$.55
Overdue Closed Reserve Material Daily Rental (per day)	\$.55
Overdue InterLibrary Material (per day)	\$.05
Overdue Maag/Depository Material (per day)	\$.10
Overdue OhioLINK Material (per day)	\$.50
Replacement Processing Fee	\$10.00
SearchOhio (OhioLINK partner) Overdue fine (per day)	\$.50
SearchOhio (OhioLINK partner) Material Replacement Fee	\$25.00

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

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.

Graduate Faculty

Please see the Current Graduate Faculty Listing (https://grad-faculty.ysu.edu/ #/) for a complete list of graduate faculty.

A

Dr. Mari L. Alschuler 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. Corey E. Andrews

Professor of English Graduate Faculty Member B.A., Miami University, 1992 M.A., Ohio University, 1995 Ph.D., Ohio University, 2000

Dr. Felicia P. Armstrong

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. Abdu Arslanyilmaz

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 Graduate Faculty Member 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. Morgan Bagley

Assistant Professor of Kinesiology and Sport Science Graduate Faculty Member B.S., Mount Union College, 2003 M.A., Kent State University, 2005 Ph.D., Kent State University, 2015

Dr. Snjezana Balaz

Associate Professor of Physics and Astronomy Graduate Faculty Member B.S., Northland College, 2001 M.S., University of Nebraska, 2005 Ph.D., University of Nebraska, 2007

Dr. Ganesaratnam K. Balendiran

Professor of Chemistry Graduate Faculty Member B.S., University of Sri Lanka, 1985 Ph.D., University of Wisconsin-Madison, 1991

Christopher Barzak

Professor of English Graduate Faculty Member B.A., Youngstown State University, 1998 M.A., Youngstown State University, 2003 M.F.A., Chatham University, 2010

Dr. Patrick J. Bateman

Professor of Management Graduate Faculty Member 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

Professor of English Graduate Faculty Member B.F.A., Bowling Green State University, 1995 M.A., Purdue University, 2001 Ph.D., Purdue University, 2007

Dr. Jane Beese

Professor of Teacher Education Graduate Faculty Member B.A., University of Akron, 1987 M.A., Case Western Reserve University, 1991 Ed.D., University of Akron, 2008

Dr. Christopher M. Bellas

Professor and Graduate Coordinator Graduate Faculty Member 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, 2010

Sheila M. Blank

Associate Professor of Nursing Graduate Faculty Member B.S.N., Youngstown State University, 2001 School Nurse License, Youngstown State University, 2005 M.S.N., Youngstown State University, 2007 D.N.P., Case Western Reserve University, 2019

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 Ph.D., The City University of New York Graduate Center, 2000

Dr. Vamsi Borra

Assistant Professor of Electrical and Computer Engineering Graduate Faculty Member B.E., Jawaharlal Nehru Technological University, 2011 M.S., Youngstown State University, 2014 Ph.D., University of Toledo, 2017

Dr. Kristopher Brown

Graduate Faculty Member B.A., Youngstown State University, 2012 M.S., Youngstown State University, 2014 Psy.D., California Southern University, 2020

Mary Brown

Graduate Faculty Member

Dr. S. Cory Brozina

Assistant Professor and Director of First-Year Engineering Graduate Faculty Member B.S., Virginia Tech, 2005 M.S., Virginia Tech, 2007 Ph.D., Virginia Tech, 2015

Dr. Jeffrey M. Buchanan

Professor of English and Teacher Education Graduate Faculty Member A.B., University of Michigan, 1990 M.A., University of Pittsburgh, 1997 Ph.D., University of Michigan, 2002

Dr. Michael Butcher

Professor of Biological Sciences Graduate Faculty Member B.S., Christopher Newport University, 1996 M.S., Wake Forest University, 2000 Ph.D., University of Calgary, 2006

С

Dr. Jonathan J. Caguiat Professor of Biological Sciences Graduate Faculty Member B.S., University of Michigan, 1988 Ph.D., Michigan State University, 1995

Dr. Matthew Campbell

Assistant Professor of Kinesiology and Sport Science Graduate Faculty Member B.S., University of Maine at Presque Isle, 2010 M.S., California University of Pennsylvania, 2011 Ph.D., Springfield College, 2020

Dr. Joseph W. Carucci

Professor of Music Graduate Faculty Member B.A., Eastman School of Music, 1996 M.A., University of Kentucky, 2001 D.M.A., University of Kentucky, 2009

Dr. Dawna Lynn Cerney

Professor of Geography Graduate Faculty Member B.S., University of Lethbridge (Canada), 1994 M.E.Des., University of Calgary (Canada), 2000 Ph.D., Texas State University, 2006

Dr. Huaiyu (Peter) Chen

Associate Professor of Accounting and Finance Graduate Faculty Member B.A., Wuhan University, (China), 1997 M.B.A., Clarkson University, 1999 Ph.D., Syracuse University, 2003

Dr. Jeong Hoon Choi

Associate Professor of Management

Graduate Faculty Member B.A., Seoul National University, 2000 M.B.A., Seoul National University, 2006 M.S., The State University of New York at Buffalo, 2007 Ph.D., 2011

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

Joy Christiansen Erb

Acting Chair and Professor of Art Graduate Faculty Member B.F.A., Miami University, 2001 M.F.A., Texas Woman's University, 2005

Dr. Miri Chung

Assistant Professor of Marketing Graduate Faculty Member B.S., Seoul National University (South Korea), 2006 B.B.A. Seoul National University (South Korea), 2009 M.A., Seoul National University (South Korea), 2009 Ph.D., University of Rhode Island, 2015

Dr. Susan Citrak

Assistant Professor of Chemistry Graduate Faculty Member B.S., Mills College, 2013 Ph.D., University of California, 2018

Dr. Jeffrey T. Coldren

Chair and 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

Associate 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. Maria Conti Maravillas

Assistant Professor of English Graduate Faculty Member B.A., Walsh University, 2012 M.A., Kent State University Ph.D., University of Arizona, 2019

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

Joe Corpa

Graduate Faculty Member

Dr. Michael J. Crescimanno

Professor of Physics and Astronomy Graduate Faculty Member B.A., Princeton, 1985 Ph.D., University of California, Berkeley, 1991

Dr. M. Kathleen L. Cripe

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

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

D

Dr. Ramesh Dangol

Professor of Management Graduate Faculty Member B.A., Middlebury College, 1997 M.B.A., Ball State University, 2002 Ph.D., Purdue University, 2012

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

Dr. Ronald E. Davis

Assistant Professor Graduate Faculty Member B.S.W., Youngstown State University M.S.W., University of Akron Ph.D., Walden University, 2021

Dr. Richard Albert Deschenes, Jr.

Assistant Professor of Civil/Environmental and Chemical Engineering Graduate Faculty Member B.S., University of Arkansas, 2012 M.S., University of Arkansas, 2014 Ph.D., University of Arkansas, 2017

Dr. Suzanne Diamond

Professor of English Graduate Faculty Member B.A., Rutgers University, 1986 Ph.D., Rutgers University, 1996

Dr. Thomas P. Diggins

Professor of Biological Sciences Graduate Faculty Member B.A., Kent State University, 1986 M.S., State University of New York, 1991 Ph.D., State University of New York, 1997

Rachael Dobson

Graduate Faculty Member

Dr. Shannon Joy Dudash

Assistant Professor of Physical Therapy Graduate Faculty Member B.S., Youngstown State University, 2006 D.P.T., Youngstown State University, 2009

E

Dr. Adam C. Earnheardt

Professor of Communication Graduate Faculty Member B.S., Clarion University of Pennsylvania, 1995 M.S., Clarion University of Pennsylvania, 1999 Ph.D., Kent State University, 2007

Dr. Kent J. Engelhardt

Professor of Music Graduate Faculty Member B.M., Youngstown State University, 1986 M.M., Youngstown State University, 1993 M.A., University of Pittsburgh, 1999 Ph.D., University of Pittsburgh, 2001

Dr. Rangamohan V. Eunni

Professor of Management Graduate Faculty Member M.S., University of Bath (UK), 1997 D.B.A., Boston University, 2003

F

Dr. Kate E. Ferguson

Lecturer of Music Graduate Faculty Member B.M., Kent State University, 1998 M.M., University of Akron, 2004 Ph.D., Kent State University, 2017

Dr. Amy Fluker

Associate Professor of History Graduate Faculty Member B.A., Westminster College, 2008 M.A., University of Mississippi, 2010 Ph.D., University of Mississippi, 2015

Dr. Francois P. Fowler

Professor of Music Graduate Faculty Member B.M., University of Ottawa, 1996 M.M., Florida State University, 1998 D.M., Florida State University, 2002

Dr. Kendra Fowler

Professor of Marketing Graduate Faculty Member B.S., Kent State University, 1993 M.B.A., Kent State University, 1995

Ph.D., Kent State University, 2011

Dr. Timothy Francisco

Professor of English Graduate Faculty Member B.A., Western Connecticut State University, 1987 M.A., Western Connecticut State University, 1993 Ph.D., University of Alabama, 2001

Dr. David B. Fruehstorfer

Lecturer of Psychology Graduate Faculty Member B.A., Kent State University, 1989 M.Ed., Kent State University, 1995 Ph.D., Kent State University, 2010

Lori Ann Fusco

Associate Professor of Nursing Graduate Faculty Member B.S.N., Youngstown State University, 1997 M.S.N., Youngstown State University, 2013 D.N.P., Case Western Reserve University, 2020

G

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