

**YOUNGSTOWN STATE UNIVERSITY  
GRADUATE BULLETIN SUPPLEMENT  
2015–2016**

EFFECTIVE AUGUST 2015  
YOUNGSTOWN, OHIO

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College of Graduate Studies  
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One University Plaza  
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**ACADEMIC CALENDAR INFORMATION CAN BE FOUND AT THE  
FOLLOWING LINK:**

[http://web.yzu.edu/gen/ysu/Academic\\_Calendars\\_m3159.html](http://web.yzu.edu/gen/ysu/Academic_Calendars_m3159.html)

**STUDENT FEES, CHARGES, AND FINES CAN BE FOUND AT THE  
FOLLOWING LINK:**

[http://web.yzu.edu/gen/ysu\\_generated\\_bin/documents/basic\\_module/AR\\_2015\\_Fall\\_charges\\_fees.pdf](http://web.yzu.edu/gen/ysu_generated_bin/documents/basic_module/AR_2015_Fall_charges_fees.pdf)

**THE COLLEGE OF GRADUATE STUDIES  
OTHER REGULATIONS**

The Board of Trustees changed the name of the School of Graduate Studies and Research to the College of Graduate Studies.

Adjunct, Designated, Associate faculty status terms were changed from a two-year term to a five-year term. Associate status is no longer renewable.

Members of Regular Graduate Faculty will be required to complete IRB training in Human Subjects.

*The following paragraphs were added to the Thesis or Dissertation policy on page 34 of the 2014-2016 Graduate Bulletin.*

A change was made to the Thesis/Dissertation committee procedure. Students are asked to initiate an online form as soon as thesis committee is identified.

Students must submit an acceptable iThenticate report at the time of submission to the College of Graduate Studies.

*The following paragraphs were added to Assistantship policy on page 51 of the 2014-2016 Graduate Bulletin.*

**ASSISTANTSHIPS**

YSU was added to the list of universities that have agreed to the “Resolution Regarding Graduate Scholars, Fellows, Trainers and Assistants” The intent of the resolution is to provide a frame work for the acceptance of GA offers. Offers made and accepted by April 15<sup>th</sup> are considered binding unless a written release is accepted.

The Graduate Assistantship appointment dates were set to align with the resolution of Graduate Scholars, Fellows, Trainers and Assistants as well as support recruiting efforts. All renewals for Graduate Assistantship and Teaching Assistants will now be renewed by January 1, for the upcoming fall and spring appointments. New Graduate Assistant appointments must be received by May 1. After that date, the redistribution of funds will be allocated by the Assistantship Allocation committee.

The language requirement for international students with a Graduate Assistantship was modified to drop the second, written language test for Graduate Assistants.

The tuition remission policy was revised to allow Graduate Assistants with a spring only contract to receive summer tuition remission.

*The following paragraphs were added to International Student Admission policy on page 301 of the 2014-2016 Graduate Bulletin.*

## INTERNATIONAL STUDENT ADMISSION

An external evaluation agency review will determine the academic equivalent of an international degree to a U.S. 4-year bachelor's degree to proceed with the admissions review.

### Non-U.S. Transcript/Academic Credential Requirements for all College of Graduate Studies Applicants

Any applicant (including U.S. citizens) who attended a non-U.S. educational institution for 24 semester hours or less must provide a sealed certified/attested official transcript to the College of Graduate Studies.\*

Any applicant (including U.S. citizens) who attended non-U.S. educational institutions for more than 24 semester hours or who earned a Bachelor's degree (or its equivalent) or Master's degree (or its equivalent) from a non-U.S. institution or where English was not the language of instruction is required to submit to YSU:

- an official course-by-course evaluation of each certified/attested non-U.S. transcript with Grade Point Average (GPA) equated to a 4.0 scale
- an official English translation of the transcript if the transcript is not in English via an approved evaluation agency

*International students attending a non-U.S. institution who apply for admission to the College of Graduate Studies prior to the completion of all bachelor's degree coursework and the awarding of the bachelor's degree will also need to request an evaluation of the final transcript as soon as all grades are posted. Proof of degree is required for admission to the College of Graduate Studies.*

The official transcript evaluation with a copy of the certified/attested transcript must be sent directly from a National Association of Credential Evaluation Services (NACES) approved agency to:

Youngstown State University  
College of Graduate Studies  
1 University Plaza  
Youngstown, OH 44555

Preferred evaluation agencies are:

- Educational Credentials Evaluators (ECE) ([www.ece.org](http://www.ece.org))
- Josef Silny & Associates, Inc., International Education Consultants ([www.jsilny.org](http://www.jsilny.org))
- World Education Services (WES) ([www.wes.org](http://www.wes.org))

YSU will accept an evaluation from another NACES approved evaluator if that evaluator requires a certified/attested official transcript from the institution attended for the evaluation. For a list of NACES members, please visit [www.naces.org](http://www.naces.org).

Youngstown State University has no affiliation with the preferred evaluators. However, these evaluators are known to provide fast and accurate services to applicants.

\*If a study abroad student provides an official transcript from a regionally accredited U.S. school of record that documents the study abroad courses, no additional transcript is required.

The following changes were made to the Transfer Credit Policy page 31 of the 2014-2016 Graduate Bulletin.

## **TRANSFER CREDITS**

### *Master's Degree*

*Up to nine semester hours (12 quarter hours) of graduate work completed at other accredited institutions may be applied toward a master's degree at YSU, provided the student earned a grade of A or B in such courses.*

### *Doctoral Degree*

*Up to 18 semester hours (24 quarter hours) of post-master's degree graduate work completed at other accredited institutions may be applied toward a doctoral degree at YSU, provided the student earned a grade of A or B in such courses.*

### *Graduate Certificate and Degree Programs*

*The following guidelines indicate the maximum credit hours of graduate work completed at other accredited institutions that may be applied toward a graduate certificate or degree at YSU, provided the student earned a grade of A or B in such courses:*

- Up to 3 semester hours (4 quarter hours) for programs requiring 12-15 semester hours*
- Up to 6 semester hours (8 quarter hours) for programs requiring 16-29 semester hours*
- Up to 9 semester hours (12 quarter hours) for programs requiring 30 – 44 semester hours*
- Up to 12 semester hours (16 quarter hours) for programs requiring 45-59 semester hours*
- Up to 15 semester hours (20 quarter hours) for programs requiring 60-89 semester hours*
- Up to 18 semester hours (24 quarter hours) for programs requiring 90 or more semester hours*

The following paragraphs replace the Posthumous Degree Policy page 37 of the 2014-2016 Graduate Bulletin.

## **POSTHUMOUS DEGREES**

A deceased student who was enrolled in an undergraduate, graduate or doctoral degree program at the University at the time of his/her death may be recommended for a posthumous degree by a faculty member, department chairperson, or dean of the appropriate college or academic unit. A recommendation must be in writing and proceed, respectively, for approval as follows: faculty member to chairperson, chairperson to Dean, Dean to Provost and Vice President of Academic Affairs. The Provost and Vice President of Academic Affairs will notify the Registrar if the recommendation is approved.

In order for a posthumous degree to be awarded, a student must be in good academic standing and have substantially completed the applicable degree requirements. Substantial completion means:

- For undergraduate degrees and master degrees without a thesis requirement, the student must be within one semester of completing all coursework and degree requirements.
- For doctoral programs and master degree programs with a thesis requirement, the student must be within one semester of completing all coursework and degree requirements; and the student must have completed a full draft of his/her thesis to the satisfaction of his/her thesis chairperson.

If approved, the appropriate Dean will notify the immediate family of the student who may choose to have the diploma presented at commencement or in a private ceremony. If the diploma will be presented at commencement, it will occur at the next feasible commencement.

Diplomas for posthumous degrees will be identified as “Awarded Posthumously.”

## DOCTOR OF EDUCATION IN EDUCATIONAL LEADERSHIP

### DEPARTMENT CHAIR

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### PROGRAM COORDINATOR

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The following changes (change indicated in red font, bold and italics) were made to degree requirements on pages 57-58 of the Graduate Bulletin 2014-2016.

### DEGREE REQUIREMENTS

The credit hours required for the Ed.D. in educational leadership consists of a minimum of ~~69~~ **61** semester hours beyond the master's degree. These include 30 semester hours of doctoral core courses, ~~21~~ **18** hours of electives, ~~a 3-hour professional skills seminar~~, a 3-hour leadership internship or clinical practice, and ~~12~~ **10** hours of dissertation studies.

A minimum of 39 semester hours of graduate credit beyond the master's degree, exclusive of dissertation credits, must be earned at YSU. Students can transfer up to 18 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.

Educational Leadership Core		<b><i>15 18 s.h.</i></b>
EDAD 8122	Leadership in Education	3 s.h.
EDAD 8125	Educational Politics and Policymaking in the United States	3 s.h.
<b><i>EDAD 8130</i></b>	<b><i>Learning Processes and the Instructional Leader</i></b>	<b><i>3 s.h.</i></b>
EDAD 8140	Seminar in Administrative Theory	3 s.h.
EDAD 8155	Seminar in Current [Educational] Issues	3 s.h.
FOUN 8102	Perspectives on Leadership Among Diverse Populations	3 s.h.
Educational Research Core		<b><i>15 12 s.h.</i></b>
EDAD 8185	Seminar in Educational Research/Dissertation Proposal	3 s.h.
FOUN 8104	Research Strategies in Educational Administration	3 s.h.
<del><b><i>FOUN 8110</i></b></del>	<del><b><i>Theories of Inquiry</i></b></del>	<del><b><i>3 s.h.</i></b></del>
FOUN 8112	Qualitative Research [for Educators]	3 s.h.
FOUN 8114	Advanced Research Design and Statistics	3 s.h.

Concentration Courses ~~21~~ **18** s.h. minimum from a concentration area as set out on curriculum sheets and approved by advisor from candidate's primary professional discipline

- ~~• ***Educational Leadership Public and Non-Public Schools***~~
- ~~• ***Educational Leadership in Health Care Settings***~~
- ***Leadership in Public and Non-Public Schools (12 s.h. of educational leadership electives and 6 s.h. of teaching and learning electives)***
- ***Leadership in Health and Human Service Organizations***

<del>Professional Skill Development</del>	<del>3 s.h.</del>	
<del>EDAD 8100</del>	<del>Professional Skill Development Seminar</del>	<del>3 s.h.</del>

Clinical Practice in Educational Leadership (choose one)		3 s.h.
EDAD 7022E	Clinical Experience: Elementary Principalship	3 s.h.
EDAD 7022M	Clinical Experience: Middle School Principalship	3 s.h.

EDAD 7022S	Clinical Experience: Secondary Principalship	3 s.h.
EDAD 7040	Clinical Experience: Administrative Specialist	3 s.h.
EDAD 7050	Clinical Experience: Superintendency/CEO	3 s.h.
<b>Dissertation Study</b>		<del>12</del> 10 s.h. minimum
EDAD 8190	Dissertation Study	<del>12</del> 10 s.h.



# DOCTOR OF PHYSICAL THERAPY

## DEPARTMENT CHAIR

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The following changes (change indicated in red font, bold and italics) were made to required courses on pages 63-64 of the Graduate Bulletin 2014-2016.

## ADMISSION REQUIREMENTS

In addition to the overall GPA (~~3.0~~ 3.2 minimum), a 3.0 GPA or higher in the following prerequisite courses is *required* (with a C- or better in each): anatomy, biology, chemistry, physics, physiology, psychology *and statistics*.

## DEGREE REQUIREMENTS

### Level I: Foundation Courses (waiveable) 12 s.h.

BIOL8868	Gross Anatomy I and lab	4 s.h.
BIOL8869	Gross Anatomy II and lab	4 s.h.
PHYT 8800	Pathology	4 s.h.

### Level II: Core Courses ~~101 s.h.~~ 97 s.h.

PHYT 8901	Clinical Decision Making I	6 s.h.
PHYT 8902	Functional Anatomy	3 s.h.
PHYT 8903	Language, Culture, and Health	2 s.h.
PHYT 8904	Integrated Clinical Education Experience	6 s.h.
PHYT 8905	Clinical Decision Making II	6 s.h.
PHYT 8906	Critical Inquiry I	3 s.h.
PHYT 8907	Special Topics: Pediatrics	3 s.h.
PHYT 8908	Legal and Ethical Issues in Physical Therapy	2 s.h.
PHYT 8909	Clinical Decision Making III	6 s.h.
PHYT 8910	Critical Inquiry II	2 s.h.
PHYT 8911	Special Topics: Geriatrics	2 s.h.
PHYT 8913	Management and Leadership in Physical Therapy	2 s.h.
PHYT 8914	Clinical Education II	4 s.h.
PHYT 8916	Critical Inquiry III	2 s.h.
PHYT 8918	Professional Issues	2 s.h.
PHYT 8919	Clinical Education III	6 s.h.
PHYT 8920	Clinical Education IV	12 s.h.
PHYT 8923	Community Applications	3 s.h.
PHYT 8924	Histology	1 s.h.
PHYT 8925	Applied Neuroscience for Physical Therapists	4 s.h.
PHYT 8926	Imaging and Lifespan Pathology for Physical Therapy	2 s.h.
PHYT 8928	Healthcare Delivery	1 s.h.
PHYT 8929	Critical Decision Making III: Advanced Cases	3 s.h.
PHYT 8930	Clinical Decision Making IV: Advanced Cases	2 s.h.
<del>PHYT 8931</del>	<del>Physical Therapy Specialty Applications</del>	<del>4 s.h.</del>
PHYT 8932	Pharmacology for Physical Therapy	1 s.h.
PHYT 8933	Clinical Foundation Skills I	3 s.h.
PHYT 8934	Clinical Foundation Skills II	2 s.h.
PHYT 8944	Clinical Decision Making IV-Part 1	3 s.h.
PHYT 8945	Clinical Decision Making IV-Part 2	3 s.h.

### Level III: Electives

1-12 s.h.

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

PHYT 8921	Independent Study	1-6 s.h.
PHYT 8922	Research	1-6 s.h.
PHYT 8938	Special Topics in Physical Therapy	1-5 s.h.

Total Hours Required for Degree ~~101-113 s.h.~~ 97-109 s.h.

## MASTER OF ARTS IN ENGLISH

### PROGRAM DIRECTOR

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*The following change (change indicated in red font, bold and italics) was made to required courses on page 76 of the Graduate Bulletin 2014-2016.*

### DEGREE REQUIREMENTS

#### M.A. in English

To complete this option, students must complete 30 semester hours in English courses at the graduate level; exceptions must have prior approval of the Department Chair and the Director of Graduate Studies. In addition to theory, language, discourse, or writing courses required above, students selecting this option must take at least two literature courses from a list of approved courses, *as well as one of these courses: English 6900, Methods of Literary Research, or English 6901, Methods of Composition Research*. To complete their degree requirements, students in this option may either submit a thesis or a graduate portfolio.

## MASTER OF ARTS IN FINANCIAL ECONOMICS

### PROGRAM DIRECTOR

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The following change (change indicated in red font, bold and italics) was made to required courses on page 79 of the Graduate Bulletin 2014-2016.

#### Core Courses

##### Courses That May Be Waived

ECON 6904	Quantitative Methods	3 s.h.
FIN 6900	Financial Accounting and Finance for Decision Making	4 s.h.

##### Required Courses

ECON 6912	Microeconomic Theory	3 s.h.
ECON 6922	Macroeconomic Theory	3 s.h.
ECON 6939	The Economics of Financial Markets and Institutions	3 s.h.
ECON 6976	Econometrics	3 s.h.
ECON 6998	Research Seminar	3 s.h.
<del>FIN 6921</del>	<del>Financial Management</del>	<del>3 s.h.</del>
<i>FIN 6902</i>	<i>Accounting and Finance for Decision Making</i>	<i>1 s.h.</i>
<i>FIN 6923</i>	<i>Corporate Financial Management</i>	<i>2 s.h.</i>
FIN 6924	Securities Analysis	3 s.h.
FIN 6939	Multinational Accounting and Finance or	
FIN 6953	Advanced Financial Analysis	3 s.h.

## MASTER OF ARTS IN GERONTOLOGY

### PROGRAM DIRECTOR

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*The following change (change indicated in strikethrough, red font, bold and italics) was made to admission requirements on page 80 of the Graduate Bulletin 2014-2016.*

### ADMISSION REQUIREMENTS

In addition to the minimum criteria set by the School of Graduate Studies and Research, 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) ***A satisfactory score on the Graduate Record Examination (GRE).***~~
- 3) Three (3) letters of recommendation from individuals familiar with the students' academic or professional background.
- 4) 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.
- 5) A personal interview is optional.
- 6) A Resume or Curriculum Vitae.
- 7) A social statistics course at the undergraduate or graduate level.
- 8) ~~***A minimum of 9 credit hours of aging related coursework at the undergraduate or graduate level.***~~

## MASTER OF ARTS IN HISTORY

### PROGRAM DIRECTOR

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*The following addition (addition indicated in red font, bold and italics) was made to degree requirements on page 83 of the Graduate Bulletin 2014-2016.*

### DEGREE REQUIREMENTS

The Department of History offers three options to candidates for a Master of Arts degree in history. Option I is designed primarily for students who wish to continue studies toward a doctorate. Option II is designed primarily to meet the needs and improve the effectiveness of secondary teachers. Option III, the certificate in applied history, is designed to prepare students for career opportunities in that field.

Each candidate for the M.A. in history must pass a written and an oral examination in three fields of concentration. The examination will require factual and interpretative material, as well as bibliography and historiography. *Students may only take their comprehensive exams if they are in Good Standing with the College of Graduate Studies.*

# MASTER OF ARTS IN INTERDISCIPLINARY COMMUNICATION

## PROGRAM DIRECTOR

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*The following changes (changes indicated in red font, bold and italics) were made to admission requirements on page 86 of the Graduate Bulletin 2014-2016.*

## 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.

~~*To be admitted to the program, students will need to submit the following for consideration:*~~

- ~~• *Satisfactory scores on the Graduate Record Examination (GRE)*~~
- 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 2.7 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

~~*A committee consisting of a faculty advisor from each of the three areas of study will objectively consider all applications and invite the most qualified applicants to interview.*~~

*Students who do not meet the requirements for admission to the MA program may be admitted on a provisional basis.*

## MASTER OF COMPUTING AND INFORMATION SYSTEMS

### PROGRAM DIRECTOR

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*The following changes (changes indicated in red font, bold and italics) were made to admission requirements on page 92 of the Graduate Bulletin 2014-2016.*

### DEGREE REQUIREMENTS

A minimum of ~~34~~ **33** 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. A core of **CSCI 6901**, CSCI6920, CSCI 6950, **CSCI 6997** and either CSCI 6921, CSCI 6940, or CSCI 6951 is required of all students. *It is recommended to take the CSCI 6997 course in the first semester if possible but no later than the second semester of the program.* Additionally, a minimum of 21 semester hours of graduate electives consisting of approved graduate and/or swing courses, *including the thesis or capstone project semester hours*, is also required. Up to nine semester hours may be taken in departments other than Computer Science and Information Systems. For graduation, the student must complete either a thesis (at least ~~six~~ **three** semester hours of CSCI 6999) or a capstone project (at least three semester hours of CSCI 6990). 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.

The student's course of study will be determined in conjunction with the student's major advisor and, possibly, with an advisor from outside of the department, particularly if the student is interested in applying information systems to some other area. This course of study will be based on the student's area of specialization, background interests, and career interests. It may also include graduate courses from other areas where appropriate. A cohesive individual curriculum program of approved elective courses will be developed in conjunction with the student's major advisor after nine semester hours of core courses have been completed. *Prior approval to carry more than 12 credit hours in any one semester must be obtained from the student's major advisor and the Dean of Graduate Studies.*



## MASTER OF HEALTH AND HUMAN SERVICES

### PROGRAM DIRECTOR

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The following changes (changes indicated in red font, bold and italics) were made to core courses on page 97-98 of the Graduate Bulletin 2014-2016.

### DEGREE REQUIREMENTS

Academic Core	24 s.h.
Tools* (6 s.h.)	
CJFS 6942 Research and Statistics	3 s.h.
HHS 6930 Health Information	3 s.h.
<i>or</i>	
HHS 6981 Grant Writing	3 s.h.
Management Skills** (5-6 s.h.)	
<del><i>MGT 6941 Managing Organizational Talent</i></del>	<del><i>2 s.h.</i></del>
<i>MGT 6930 Managing and Leading Organizations</i>	<i>2 s.h.</i>
<i>or</i>	
HHS 6971 Optimizing Performance and Commitment	3 s.h.
<del><i>MGT 6962 Organizational Staffing Process</i></del>	<del><i>3 s.h.</i></del>
<i>HHS 6900L Long Term Health Care Administration</i>	<i>2 s.h.</i>
<i>and</i>	
<del><i>MKTG 6943 Consumer and Project Management</i></del>	<del><i>2 s.h.</i></del>
<i>or</i>	
<del><i>MGT 6996 Research Problems</i></del>	
<i>MGT 6944 Managing Business Process</i>	<i>2 s.h.</i>
<i>Or</i>	
MGT 6947 Managing Technology	2 s.h.
<i>Or</i>	
HHS 6972 Information Systems for Health and Human Services Mgt.	2 s.h.
<i>Or</i>	
<del><i>HHS 6930 Health Informatics</i></del>	<del><i>3 s.h.</i></del>
Issues in Health and Human Services (12 s.h.)	
HHS 6949 Principles of Community Health Practice	3 s.h.
HHS 6953 Health Behavior	3 s.h.
HHS 6958 Health Services Issues	3 s.h.
HHS 6962 Health Care Reform	3 s.h.
Concentration Areas (with thesis/nonthesis option stated below)	10-14 s.h.

Students must choose a concentration area from the following options:

---

\* Prerequisites for the tools courses include undergraduate research methodology, a statistics course, and ACCT 2602 Financial Accounting or equivalent.

\*\* Prerequisite for the management skills component is AHLTH 4810 Management Skills for Health Professionals, MGT 3725 Fundamentals of Management, or equivalent.

Health Promotion	(12-13 s.h.)	
HHS 6959	Foundation and Planning	3 s.h.
HHS 6960	Implementation and Evaluation	3 s.h.
HHS 6980	Seminar	3 s.h.
HHS 6990	Practicum	3 s.h.
	Or	
HHS 6999	Thesis	4 s.h.

or

Administration for Health and Human Services Professions (12-13 s.h.)		
HHS 6918	Program Planning and Evaluation	3 s.h.
HHS 6922	Planning and Fiscal Management	3 s.h.
HHS 6980	Seminar	3 s.h.
HHS 6990	Practicum	3 s.h.
	Or	
HHS 6999	Thesis	4 s.h.

Health Informatics	(12-13 s.h.)	
HHS 6935	Clinical Informatics	3 s.h.
HHS 6945	Health Care Systems Analysis	3 s.h.
HHS 6922	Planning and Fiscal Management	3 s.h.
HHS 6990	Practicum	3 s.h.
	Or	
HHS 6999	Thesis	4 s.h.

~~Physical Education Track 10-12 s.h.~~

~~HEPE 6900 Pedagogical Analysis 3 s.h.~~

~~HEPE 6903 Curriculum Development 3 s.h.~~

~~and~~

~~Non-thesis Option (6 s.h. required) 10-12 s.h.~~

~~HEPE 6905 Contemporary Issues in Sport Pedagogy 3 s.h.~~

~~HEPE 6920 Mechanical Analysis of Motor Movements 3 s.h.~~

~~or~~

~~Thesis (4 s.h. required)~~

~~HHS 6999 Thesis 4 s.h.~~

Total Hours Required for Degree

34-37 s.h.

## MASTER OF PUBLIC HEALTH

### PROGRAM DIRECTORS

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The following change (change indicated in red font, bold and italics) was made to core courses on page 106 of the Graduate Bulletin 2014-2016.

<b>Core Courses</b>	<b><i>18 s.h.</i></b>	
MPH 6901	Public Health Concepts	3 s.h.
MPH 6902	Social and Behavioral Sciences in Public Health	3 s.h.
MPH 6903	Epidemiology in Public Health	3 s.h.
MPH 6904	Biostatistics in Public Health	3 s.h.
MPH 6905	Health Services Administration in Public Health	3 s.h.
MPH 6906	Environmental Health Sciences in Public Health	3 s.h.
<del>MPH 6907</del>	<del>Grant Writing in Public Health Practice</del>	<del>3 s.h.</del>
<del>MPH 6908</del>	<del>Public Health Practice and Issues</del>	<del>3 s.h.</del>
<b>Generalist Track Courses</b>	<b><i>9 s.h.</i></b>	
MPH 6907	Grant Writing in Public Health Practice	3 s.h.
MPH 6908	Public Health Practice and Issues	3 s.h.
MPH 6909	Public Health Research and Evaluation	3 s.h.
<b>Electives</b>	<b><i>9 s.h.</i></b>	
MPH 6994	Individual Investigation in Public Health	1-3 s.h.
MPH 6996	Practicum	3 s.h.
(Additional Electives Available)		
<b>Required Project</b>	<b>6 s.h.</b>	
MPH 6998	M.P.H. Capstone Project I	3 s.h.
MPH 6999	M.P.H. Capstone Project II	3 s.h.
<b>Total Hours Required for Degree</b>		<b>42 s.h.</b>

## **MASTER OF SCIENCE IN APPLIED BEHAVIOR ANALYSIS**

**ADMISSION TO THIS PROGRAM IS CURRENTLY SUSPENDED.**

### **PROGRAM DIRECTOR**

Stephen Flora  
105 DeBartolo Hall  
(330) 941-1619  
[srflora@ysu.edu](mailto:srflora@ysu.edu)

## MASTER OF SCIENCE IN MATHEMATICS

### PROGRAM DIRECTOR

G. Jay Kerns  
620 Lincoln Building  
(330) 941-3310  
[gkerns@ysu.edu](mailto:gkerns@ysu.edu)

*The following changes (changes indicated in red font, bold and italics) were made to degree requirements on pages 122-123 of the Graduate Bulletin 2014-2016.*

### DEGREE REQUIREMENTS

- A minimum of 33 semester hours of credit excluding Math 5821 and Math 5851A cumulative grade point average of at least 3.0
- The student's combined undergraduate and graduate programs must include a mathematics core comprising the following courses or their equivalent:
  - Math 5821 Abstract Algebra I taken in the earliest available semester
  - Math 5851 Real Analysis I taken in the earliest available semester
  - Math 5825 Advanced Linear Algebra
  - Math 5852 Real Analysis II
  - Math 6996 Mathematical Project
- Satisfactory performance on written and oral examinations. The subject matter for these examinations should reflect both the core curriculum and the option selected (see Description of Options below) and must be approved by the Graduate Executive Committee. Additionally, the following distribution requirements apply:
  - Written exams on three courses in mathematics or statistics
  - 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 one course from Math 5825, 5852, or a core requirement course must be examined
- At least 17 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.*

### DESCRIPTION OF OPTIONS

In addition to completing the courses which make up the mathematics core, students will choose from among the following options. Each option has its own core and elective requirements. Under extenuating circumstances, reasonable substitutions can be made with the approval of the Graduate Executive Committee.

The description of the options will refer to the following list of sequences.

Abstract Algebra: MATH 6922, 6923	Logic: MATH 6984, 6985
Actuarial Mathematics: STAT 5802, 6904	Mathematical Statistics: STAT 6943, 6944
Advanced Data Analysis: STAT 6940, 6948	Number Theory: MATH 5828, 6928
Combinatorics: MATH 5835, 6938	Numerical Analysis: MATH 5861, 6925
Complex Analysis: MATH 6975, 6976	Operations Research: MATH 5845, 6942
Differential Equations: MATH 6955, 6957	Real Analysis: MATH 6965, 6966
Economics: ECON 6912, 6922	Topology: MATH 6980, 6981
<i>Finance: ACCT 6901, FIN 6901, 6921</i>	
Graph Theory: MATH 5835, 6937	

Option I: Predoctoral Studies in Mathematics and Applied Mathematics

The core requirements are Math 6915 Mathematical Foundations, the first course in each of the Abstract Algebra, Complex Analysis, Real Analysis, and Topology sequences, *and the completion of the first course in one of the Advanced Data Analysis, Differential Equations, Mathematical Statistics, Numerical Analysis, or Operations Research sequences. The elective requirement is the second course in a sequence, excluding the Actuarial Mathematics, Economics, and Finance sequences.*

#### *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 six hours of graduate coursework can be completed as an undergraduate and used exclusively for graduate credit.*

## MASTER OF SCIENCE IN NURSING

### MSN PROGRAM DIRECTOR

Valerie O'Dell  
3132 Cushwa Hall  
(330) 941-2177  
[vmodell@ysu.edu](mailto:vmodell@ysu.edu)

*The following changes (changes indicated in red font, bold and italics) were made to admission requirements on page 159 of the Graduate Bulletin 2014-2016.*

### ADMISSION REQUIREMENTS

All nursing applicants must meet the following requirements:

- Regular admission requires a cumulative undergraduate grade point average of at least 3.0 (on a 4.0 scale)
- Satisfactory completion of undergraduate courses in health assessment, statistics, and research methods
- Hold a B.S.N. degree from an accredited program
- Current Ohio Registered Nurse *license and minimum of one year professional work experience. ~~or eligibility for Ohio licensure as a registered nurse (RN)~~*
- Current CPR certification, current immunizations, drug screening, and criminal background checks are to be maintained while in the program.
- All nurse anesthetist applicants must submit an official report of Graduate Record Examination (General Test) scores completed within the past five years.
- Applicants with a cumulative grade point average of less than 3.0 (on a 4.0 scale) must submit an official report of Graduate Record Examination (General Test) scores completed within the past five years.
- Successful/satisfactory interview is required for all MSN nursing applicants meeting minimum requirements.
- Students not meeting regular admission requirements may be provisionally admitted. See the *Graduate Bulletin* under Provisional Admission.

Applicants must submit the following items to Graduate Admissions in Coffelt Hall:

- Official transcripts from each college or institution of higher learning attended (other than YSU)
- Three satisfactory **Recommendation Reference Forms: ~~letters of reference~~**: one each from a faculty member, an employer, and a colleague
- Letter of intent (300 words maximum) stating one's professional career goals and how graduate education in nursing will help fulfill said goals
- Resume or curriculum vita (including education, work and/or research experience, publications, certifications, licenses, grants, professional affiliations, awards, honors, presentations, and/or courses taught)

Application deadline for Family Nurse Practitioner (FNP) option: February 1. The FNP option is a cohort-based program (beginning each fall).

## MASTER OF SCIENCE IN ENVIRONMENTAL SCIENCE

### PROGRAM DIRECTOR

Felicia Armstrong  
2080 Moser Hall  
(330) 941-1385  
[fparmstrong@ysu.edu](mailto:fparmstrong@ysu.edu)

*The following program name was changed from Environmental Studies to Environmental Science change (change indicated in bold and italics) pages 118-120 of the Graduate Bulletin 2014-2016*

### 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 Moser Hall and is administered by the Department of Geological and Environmental Sciences (GES). 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*, to deepen their expertise with elective courses, and to demonstrate their abilities to prepare a scholarly thesis. 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.

### FACULTY RESEARCH INTERESTS

Isam E. Amin, Ph.D., Associate Professor  
Ground water contamination and remediation; characterization and remediation of Mahoning River banks; sediment transport in rivers and streams; intra-state water conflicts

Felicia Armstrong, Ph.D., Associate Professor  
Environmental chemistry of soils; water quality; ecotoxicology; soil remediation

Raymond Emil Beiersdorfer, Ph.D., Professor  
Environmental geochemistry

Jeffrey C. Dick, Ph.D., Professor  
Groundwater contamination; water quality characterization/baseline investigations and petroleum geology

Alan M. Jacobs, Ph.D., Professor  
Site characterization; health risk assessment; project management; groundwater contamination

Colleen E. McLean, Ph.D., Assistant Professor  
Aqueous and environmental geochemistry; paleolimnology; biogeochemistry

### ASSOCIATED FACULTY RESEARCH INTERESTS

Dawna L. Cerney, Ph.D., Associate Professor  
Physical geography; mountain geography; biogeography; field methods; landscape level change and conservation

Carl G. Johnston, Ph.D., Associate Professor of Biological Sciences  
Environmental microbiology; microbial ecology; bioremediation using indigenous microbes and fungi

Douglas M. Price, Ph.D., Associate Professor of Civil and Environmental Engineering  
Carbon dioxide capture; evaluation of point-source carbon dioxide footprint at manufacturing facilities; biofuel production by fermentation; membrane separation of gases

Ian Renne, Ph.D., Assistant Professor of Biological Sciences  
Plant community ecology and invasive plant species; avian ecology; ecological and evolutionary dynamics of allelopathic systems



Bradley Shellito, Ph.D., Associate Professor of Geography  
Applications of geospatial technology (Geographic Information Science, remote sensing, global positioning systems, and 3D Modeling)

Josef B. Simeonsson, Ph.D., Associate Professor of Chemistry  
Analytical chemistry including atomic and molecular spectrometry methods; trace and ultratrace analysis; analytical laser spectroscopy methods-fluorescence; ionization and Raman; environmental analysis and clinical analysis; biogeochemical cycling of trace species; environmental remediation; biological trace element research

## ADMISSION REQUIREMENTS

- One year of college-level general chemistry with lab
- One semester of calculus
- A minimum of 15 semester hours of additional science courses with two of these additional courses containing a lab component (chemistry, biology, environmental science, geology, environmental engineering and/or physical geography).
- An cumulative undergraduate minimum grade point average of 3.0 (on a 4.0 scale) is required for admission. Students with a GPA of under 3.0 could be considered for provisional admission.
- Satisfactory performance on Graduate Record Examination (general test)
- Three letters of recommendation.

Applicants not satisfying the minimum admission requirements may be accepted provisionally at the discretion of the Department Graduate Committee. In those cases where the undergraduate preparation is deficient in three or fewer courses, students must satisfy the deficiencies by completing the equivalent undergraduate courses with a grade of B or better within the first year of study as a provisional graduate student.

Any student admitted with provisional status will be reviewed for regular graduate admission to the program at the completion of 9 semester hours of *degree-credit* coursework. Students with an undergraduate course deficiency greater than three courses must remove the deficiency as a post baccalaureate, undergraduate student.

## DEGREE REQUIREMENTS

Environmental *science* program requires courses that are designed to provide breadth in environmental science and understanding of environmental issues and regulations. Each student admitted to the program will meet with the coordinator to choose initial coursework and meet graduate faculty. It is highly recommended that new students enroll in ENST 6995 Introduction to Environmental Science Research. Each graduate student is required to select a thesis committee with the recommendation of his or her thesis advisor within the first year of full-time graduate study.

All students in the environmental studies graduate program must have their course schedules approved by their thesis advisors every semester. A proposed course of study must be approved by the thesis committee. 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 non-faculty 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 publication submittal. 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.

Total Hours for Degree	33 s.h. required	
Required Courses:	12 s.h. required	
ENST 6900	Advanced Environmental Studies	3 s.h.
STAT 5817 or	Applied Statistics or	3 s.h.

BIOL 5853	Biometry	
ENST 6990	Thesis	6 s.h.

Select 2 of the following courses: 6 s.h. required

ENST 5800	Environmental Impact Assessment	3 s.h.
ENST 5830	Risk Assessment	3 s.h.
ENST 5860	Environmental Regulations	3 s.h.
ENST 6901	Sources of Contamination	3 s.h.
ENST 6920	Environmental Compliance	3 s.h.
ENST 6921	Industry/Institutional Management for the Environmental Professional	3 s.h.
ENST 6931	Ecological Risk Assessment	3 s.h.

NOTE: Additional ENST courses may be taken as electives.

**Recommended Courses:**

ENST 6995	Introduction to Environmental Science Research	3 s.h.
ENST 5810	Environmental Safety	1 s.h.

**Electives:** 15 s.h. required

An additional 15 semester hours of elective courses are required (a minimum total of 27 semester hours of coursework and 6 semester hours of thesis). Elective courses can come from Environmental *Science*, Geology, Biology, Civil/Environmental Engineering, Geography, Chemistry or other disciplines recommended by the graduate committee.

All graduate students in environmental *science* are required to successfully pass a graduate exam during the second year of their graduate program. Currently the Environmental Professional Intern (EPI) exam is being utilized. This exam covers topics in environmental science with respect to chemistry, biology, regulations, analysis, and other environmental issues.

No more than nine (9) 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 9 s.h. count towards the 27 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.

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.

# MASTER OF SCIENCE IN EDUCATION—EDUCATIONAL ADMINISTRATION

## DEPARTMENT CHAIR

Charles Vergon  
4104 Beeghly Hall  
(330) 941-1574  
[cbvergon@ysu.edu](mailto:cbvergon@ysu.edu)

## DEGREE REQUIREMENTS

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

~~30~~ s.h.

#### 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 leadership in promoting effective instruction. It begins to transform their perspectives from that of a classroom teacher to one of an administrator with broader perspectives and responsibilities. Other courses develop leadership knowledge and skills specific to building level operations, focusing on the role of the principal in relation to staff and the community, 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

#### Foundations (6 hours)

FOUN 6904	Introduction to Educational Research	3 s.h.
FOUN 6902	Sociological Bases of Education <i>or</i>	
FOUN 6905	Educational Challenges in Historical Perspective	3 s.h.

#### Leadership Courses (9 hours)

EDAD 6915	Learning, Teaching, and Instructional Leadership	3 s.h.
EDAD 6931	Leadership in Educational Organizations	3 s.h.
EDAD 6933	Educational Policy, Politics, and Change	3 s.h.
EDAD 6947	School Building Leadership: Models and Processes	3 s.h.

#### Administrative Specialty Courses (12 hours)

EDAD 6949	Legal and Ethical Issues in Public Administration	3 s.h.
EDAD 6952	School Finance, Resource Planning, and Management	3 s.h.
EDAD 6954	Marketing and Community Relations	3 s.h.
EDAD 6955	Professional Development and Human Resources	3 s.h.

#### Clinical Practice (3 hours)

EDAD 6975	Introduction to Administration Clinical Experience	3 s.h.
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## **MASTER OF SCIENCE IN EDUCATION – EDUCATIONAL TECHNOLOGY**

**ADMISSION TO THIS PROGRAM IS CURRENTLY SUSPENDED.**

### **PROGRAM DIRECTOR**

Charles Vergon  
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(330) 941-1574  
[cbvergon@ysu.edu](mailto:cbvergon@ysu.edu)

# MASTER OF SCIENCE IN EDUCATION—TEACHER EDUCATION

## PROGRAM DIRECTOR

Marcia Matanin  
2407 Beeghly Hall  
(330) 941- 3251  
mjmatanin@ysu.edu

*The following changes (changes indicated in red font, bold and italics) were made to degree requirements on pages 146-148 of the Graduate Bulletin 2014-2016.*

## Content Area Concentration Program

The Content Area Concentration Program in Teacher Education provides in-depth advanced study in the content area in which a teacher is licensed. Core requirements provide breadth of knowledge related to best practices in teaching, along with a research base for these practices. The content area concentration provides in-depth content knowledge, and in some cases, leads to a content area certificate. A content area certificate provides a “Highly Qualified” designation. The completion of this master’s degree, along with the certificate, enables teachers to teach in the College Credit Plus Program.

Required Courses 15 sh

### Core Requirements

- TCED 6936\* Curriculum, Assessment, and Instruction to Improve Learning
- FOUN 6904 Introduction to Educational Research or
- TCED 6932 Action Research in Rural and Urban Education
- PSYC 6903 Psychology of Education and Learning or
- TCED 6933 Brain Based Teaching and Learning
- TCED 6922 Principles of Instruction
- TCED 5888 Topical Seminar

Content Area Courses 18 sh

Candidates elect 18 sh of coursework in collaboration with their content advisor to complete the program area course requirements.

All master teacher candidates in Content Area Concentration must complete a Master Teacher Portfolio in order to graduate with a master’s degree.

\*TCED 6936, Fundamentals of Curriculum Development, has been changed to Curriculum, Assessment, and Instruction to Improve Learning for the following programs:

- Content Area Concentration
- Curriculum & Instruction
- Early Childhood
- Literacy

Total Hours Required for Degree 33 s.h.

~~Required Courses and Core Option Courses 15 s.h.~~

~~Specialty Program Area Courses, Subject Area Courses 18 s.h.~~

~~TCED 6922 Principles of Instruction 3 s.h.~~

~~Electives in Teaching Area or Thesis: Students must elect 15 s.h. of coursework in collaboration with their content advisors to complete the teaching area requirement. In some cases, workshop and process hours will be approved for degree credit within this section.~~

Optional

~~SED 6999 Thesis—Thesis hours may apply to the 33 s.h. required for Specialty~~

~~Program Area courses 2-6 s.h.~~

~~*Note: HPES Principles of Instruction course may be substituted for TCED 6922.*~~

~~*A comprehensive examination covering FOUN 6901 or 6902, FOUN 6904, TCED 6922, and TCED 6936 is required to graduate with the master's degree. Please see the Department of Teacher Education for times and dates. Those selecting the thesis option are not required to take the comprehensive examination.*~~

**CERTIFICATE IN ECONOMICS**  
DEPARTMENT OF ECONOMICS

Tod Porter, Chair  
303 DeBartolo Hall  
(330) 941-3428  
[tspporter@ysu.edu](mailto:tspporter@ysu.edu)

*The following new certificate program was added*

CERTIFICATE DESCRIPTION

This is a six-course certificate (18 semester hours) specifically designed for high school teachers who wish to participate in the College Credit Plus program and teach principles of economics.

CERTIFICATE REQUIREMENTS

ECON 6912

ECON 6922

ECON 6939

ECON 6945

Two 3-hour courses at the 6900 or 5800 level (the 5800-level classes must be taken as a graduate student)

Students must pass ECON 6912 and 6922 with a grade of "B" or better prior to teaching ECON 2610 or 2630

Note that prior to starting the program students must have taken the equivalent of one of the following courses: MATH 1552, 1570, or 1571

# CERTIFICATE IN ENTERPRISE RESOURCE PLANNING

## DEPARTMENT OF MANAGEMENT

*The following revision (changes indicated in red font, bold and italics) was made to required courses on page 169 of the Graduate Bulletin 2014-2016*

Mohan Eunni, Chair  
3379 Williamson Hall  
(330) 941-7180  
rveunni@ysu.edu

### CERTIFICATE DESCRIPTION

This four-course certificate (*8 semester hours*) is designed to meet the needs of current M.B.A. students and M.B.A. graduates interested in enhancing their effectiveness in organizations using Enterprise Resource Planning software, which is increasingly prevalent in today's business organizations. Students will have intensive hands-on experience with SAP-ERP software. The program covers topics such as ERP software evaluation and selection, materials management, configuration, and supply chain management. The overall goal of this certificate is to enable students (both current and future managers) in all areas of a business organization to be effective users of integrated ERP software and to be effective participants in managing the evaluation, installation, and use of ERP software.

Applicants for this graduate certificate must meet the requirements for admission to the College of Graduate Studies at YSU.

### CERTIFICATE REQUIREMENTS

Students must complete the following four courses:  
MGT 6947<sup>1</sup> Managing Information and Technology 2 s.h.  
MGT 6944 Managing Business Processes 2 s.h.  
MGT 6945 Business Process Integration (BPI) 2 s.h.  
MGT 6946 Supply Chain Management 2 s.h.

Non-business graduate students and area professionals with non-business degrees must complete 5 s.h. of M.B.A. courses (MGT 6930, MKTG 6943, and ACCT/FIN 6902) in addition to the 8 s.h. required for the certificate (total of 13 s.h.).

<sup>1</sup>Or the prior course name/number "equivalents": MGT 6917 Information Systems for Management (2 s.h.), MGT 6921 Operations Management (3 s.h.), MGT 6945 Business Integration (BPI) (3 s.h.), MGT 6946 Supply Chain Management (3 s.h.)



## **CERTIFICATE IN ENGLISH**

DEPARTMENT OF ENGLISH

*The following new certificate program was added*

Steven Brown, Graduate Director  
242 DeBartolo Hall  
(330) 941-1654  
[srbrown02@ysu.edu](mailto:srbrown02@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.

### **CERTIFICATE REQUIREMENTS**

**Students must take these three courses:**

English 6906 Teaching of Literature  
English 6907 Teaching of Writing  
English 6922 Twentieth-Century American Studies

**Students must take one of these two courses:**

English 6915 Early American Studies  
English 6917 Nineteenth-Century American Studies

**Students must take two of the following courses:**

English 6911 Medieval World  
English 6912 Sixteenth- and 17th-Century British Studies  
English 6913 Shakespeare and Renaissance Drama  
English 6914 Restoration and 18th-Century British Studies  
English 6915 Early American Studies  
English 6916 Nineteenth-Century British Studies  
English 6917 Nineteenth-Century American Studies  
English 6919 Studies in Young Adult Literature  
English 6920 Twentieth-Century British Studies  
English 6923 Working Class Literature  
English 6935 Studies in Romanticism  
English 6963 Perspectives in Multicultural Studies  
English 6968 Studies in Literary Form  
English 6975 English Education Seminar (for 3 sh)  
English 6976 Studies in English Education

# CERTIFICATE IN HEALTH CARE MANAGEMENT

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Joseph Lyons  
1086 Cushwa Hall  
(330) 941-3658  
[jplyons@ysu.edu](mailto:jplyons@ysu.edu)

*The following changes (changes indicated in red font, bold and italics) were made to course requirements on page 172 of the Graduate Bulletin 2014-2016.*

## CERTIFICATE REQUIREMENTS

Students must complete six semester hours from the following:

ECON 6900	Statistical Problems	3 s.h.
	<i>or</i>	
<i>CJFS 6942</i>	<i>Research and Statistics</i>	<i>3 s.h.</i>
<del>ECON 6901</del>	<del>Basic Economic Analysis</del>	<del>3 s.h.</del>
<i>ECON 6921</i>	<i>Economic Analysis of Markets and Industries</i>	<i>2 s.h.</i>
FIN 6900	Financial Accounting and Finance for Decision Making	4 s.h.
<del>MGT 6900</del>	<del>Foundations of Management</del>	<del>2 s.h.</del>
<del>MGT 6947</del>	<del>Managing Technology</del>	<del>2 s.h.</del>
<i>FIN 6923</i>	<i>Corporate Financial Management</i>	<i>2 s.h.</i>
<i>HHS 6930</i>	<i>Health Informatics</i>	<i>3 s.h.</i>
<del>MKTG 6900</del>	<del>Foundations of Marketing</del>	<del>2 s.h.</del>
<i>MKTG 6943</i>	<i>Consumer and Product Management</i>	<i>2 s.h.</i>

Students must complete nine semester hours from the following:

HHS 6918	Program Planning and Evaluation	2 s.h.
HHS 6922	Planning and Fiscal Management	4 s.h.
HHS 6959	Foundation and Planning	3 s.h.
HHS 6960	Implementation and Evaluation	3 s.h.
<del>MGT 6941</del>	<del>Managing Organizational Talent</del>	<del>2 s.h.</del>
<i>MGT 6975</i>	<i>Strategic Management</i>	<i>2 s.h.</i>

Students must complete three semester hours from the following:

HHS 6949	Community Health Practices	3 s.h.
HHS 6953	Health Behavior	3 s.h.
HHS 6958	Health Services Issues	3 s.h.

Total hours required for certificate 18 s.h.

**CERTIFICATE IN MATHEMATICS**  
DEPARTMENT OF MATHEMATICS and STATISTICS

*The following new certificate program was added*

Thomas Wakefield  
618 Lincoln Building  
(330) 941-1395  
[tpwakefield@ysu.edu](mailto:tpwakefield@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 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 School 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.

## **CERTIFICATE IN THE TEACHING OF LITERATURE**

DEPARTMENT OF ENGLISH

*The following new certificate program was added*

Steven Brown, Graduate Director  
242 DeBartolo Hall  
(330) 941-1654  
[srbrown02@ysu.edu](mailto:srbrown02@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.

### **CERTIFICATE REQUIREMENTS**

Students must take these two courses:  
English 6906 Teaching of Literature  
English 6902 Literary Thought

Students must take one course from two of the following three areas: British Literature, American Literature, and Multicultural Literature

#### **British Literature:**

English 6911 Medieval World  
English 6912 Sixteenth- and 17th-Century British Studies  
English 6913 Shakespeare and Renaissance Drama  
English 6914 Restoration and 18th-Century British Studies  
English 6916 Nineteenth-Century British Studies  
English 6920 Twentieth-Century British Studies  
English 6935 Studies in Romanticism

#### **American Literature**

English 6915 Early American Studies  
English 6917 Nineteenth-Century American Studies  
English 6922 Twentieth-Century American Studies  
English 6923 Working Class Literature

#### **Multicultural Literature**

English 6963 Perspectives in Multicultural Studies

## GRADUATE COURSES

### ACCOUNTING AND FINANCE

Peter Woodlock, Chair  
3382 Williamson Hall  
(330) 941-1873  
pdwoodlock@ysu.edu

FIN 6923 Corporate Financial Management. Participants will develop a working knowledge of corporate financial issues and apply analytical tools to make better corporate financial decisions. Participants will be capable of making decisions relating to capital budgeting, capital structure, dividend policy, acquisitions and buyouts in order to maximize firm, shareholder and investor value. Prereq.: FIN 6902 or (FIN 6901 and ACCT 6901). 2 s.h. (Change in prerequisite)

### BIOLOGY

Gary Walker, Chair  
4037 Ward Beecher Hall  
(330-941-3600  
grwalker@ysu.edu

BIOL 6901 Computational Bioinformatics. Project-based learning course with a focus on using a Linux environment and a script language such as PERL for processing large genomic datasets. Relational databases such as MySQL and BioPERL will also be covered for genomic data analysis and display. Two hours of combined lecture and lab per week. Pre-req: BIOL 6900 or permission of instructor. 2 s.h. (Change in course number (6999) and title)

BIOL 6906 Ecosystems Field Ecology. 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. 4 s.h. (Add 6900-level course)

BIOL 6909 The Human Microbiome. 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. Pre-requisites: One of the following courses: undergraduate microbiology, physiology, biochemistry, immunology, or molecular biology. 3 sh. (Add 6900-level course)

BIOL 6935 Advanced Physiology: Regulatory Mechanisms. 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. 3 s.h (Change in course title, description and course hours)

BIOL 6935L Advanced Physiology: Regulatory Mechanisms Laboratory. 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. 3 s.h. (Change in course title, description, prerequisite and course hours)

### CHEMICAL ENGINEERING

Anwarul Islam, Chair  
2445 Moser Hall  
(330) 941- 3026  
aaislam@ysu.edu

CHEN 5884 *Corrosion Engineering*. 3 s.h. (Add a new swing course.)

### COMMUNICATION

Adam Earnhardt, Chair  
Bliss Hall  
(330) 941-3631  
acearnhardt@ysu.edu

CMST 6980 *Applied Research Methods*. Introduction to and application of qualitative research methods relevant to business communication settings. 3 s.h. (Change in course description).

### **COUNSELING AND SPECIAL EDUCATION**

Jake J. Protivnak, Chair  
3305 Beeghly Hall  
(330) 941-1936  
jjprotivnak@ysu.edu

#### **COUNSELING**

COUN 7005 *Internship in Student Affairs and College Counseling*. This course will provide a weekly supervision and 600 hours of supervised field experience for student affairs and college counseling 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 6900, 6962, 7004, and 7026. Special Approval required. 6 s.h. (Change in course hours and prerequisite)

COUN 7009 *School Counseling Internship*. Supervised internship in approved school counseling programs. May be repeated. For counseling majors. Prereq: COUN 7002. Special Approval required. 6 s.h. (Change in course hours and prerequisite)

COUN 7010 *Clinical Mental Health Counseling Internship*. Supervised internship in approved community agencies offering counseling and other mental health services. May be repeated. For counseling majors. Prereq: COUN 7002. Special Approval required. 6 s.h.. (Change in prerequisite and course hours)

#### **SPECIAL EDUCATION**

SPED 6915 *Classroom Management and Crisis Intervention for Learners with Severe Emotional and Behavior Disorders*. Behavior analysis, behavior management, instruction, curriculum and program development for youth with severe emotional and/or behavior disorders. Advanced behavior change interventions and a practicum consisting of work in the field with emotionally and/or behaviorally disturbed youth required. Prereq.: Successful completion of SPED 6909. 3 s.h. (Change in prerequisite)

SPED 6927 *Curriculum Design, Adaptations and Resources for Learners with Mild/Moderate Exceptional Learning Needs*. Knowledge of curriculum terminology approaches and models, content, and design to provide and enhance access to the general curriculum for students with exceptional learning needs. Course focuses on the skills to select and implement curricular adaptations for learners with exceptional learning needs within the general education classroom. Prereq.: Successful completion of SPED 6906. 3 s.h. (Change in prerequisite)

SPED 6930 *Instructional Methodologies for Learners with Mild/Moderate and Moderate/Intensive Exceptional Learning Needs*. This course is designed to provide candidate with the opportunity to research, study, apply and analyze instructional strategies and delivery systems in the four major content areas. The candidates will use the referenced strategies to both support and promote single subject and cross-curricular high quality instruction for candidates with special needs. Prereq.: Successful completion of SPED 6914, 6927, 6928, 6929. 3 s.h. (Change in prerequisite)

SPED 7077 *Leadership in Special Education*. The course focuses on leadership, administration, and supervision of a broad range of programs and services for students with exceptionalities (students with disabilities). Topics include review of theoretical foundations, historical and sociological issues as these relate to education for special populations, as well as in-depth study of federal and state legal issues, differentiated programming and procedures, student identification and placement, individualized education plans, due process, least restrictive environment, and program monitoring and evaluation. Prereq.: None. 3 s.h. (Change in prerequisite)

### **CRIMINAL JUSTICE AND FORENSIC SCIENCE**

Patricia Wagner, Chair  
2169 Cushwa Hall  
(330) 941-3278  
pbwagner@ysu.edu

CJFS 5814 *Practice and Ethics in Forensic Science*. Overview of the forensic science discipline as it relates to the criminal justice system, including discussion of legal aspects, constitutional considerations, expert testimony, the role of the expert witness, and ethical standards and dilemmas. Also includes discussion of current events and the evolution and future of the forensic sciences. Prereq.: CJFS 3714 and CJFS 3714L. 3 s.h. (Change in course title and description)

### **ECONOMICS**

Tod Porter, Chair  
303 DeBartolo Hall  
(330) 941-3431  
tsporter@ysu.edu

ECON 6970 *Economics Internship*. The practical application of economic knowledge and statistical skills in the workplace. Students assist participating professionals in various kinds of industrial, financial, and public service organizations. By permit only. Prereq: 6912 and 6922. 3 s.h. (Change in prerequisite and course hours)

### **EDUCATIONAL FOUNDATIONS, RESEARCH, TECHNOLOGY, AND LEADERSHIP**

Charles Vergon, Chair  
4103 Beeghly Hall  
(330) 941-1437  
cbvergon@ysu.edu

FOUN 8113 *Theories of Inquiry*. 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. Prereq.: EDAD/FOUN 8104 & EDAD/FOUN 8111.3 s.h. Cross listed with EDAD 8113 (Add new 6900 or higher level course)

EDAD 8113 *Theories of Inquiry*. 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. Prereq.: EDAD/FOUN 8104 & EDAD/FOUN 8111.3 s.h. Cross listed with FOUN 8113 (Add new 6900 or higher level course)

FOUN 8111 *Advanced Research Design and Statistics*. An in-depth treatment of the major correlational, experimental, and quasi-experimental 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. Prereq.: EDAD/FOUN 8104. 3 s.h. Cross listed with EDAD 8111 (Add new 6900 or higher level course)

EDAD 8111 *Advanced Research Design and Statistics*. An in-depth treatment of the major correlational, experimental, and quasi-experimental 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. Prereq.: EDAD/FOUN 8104. 3 s.h. Cross listed with FOUN 8111 (Add new 6900 or higher level course)

EDAD 8130 *Learning Processes and the Instructional Leader*. 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. 3 s.h. (Add new 6900 or higher level course)

FOUN 8104 *Research Strategies in Educational Administration*. 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. Prereq.: None. 3 s.h. (Change in prerequisite and description)

FOUN 8112 *Qualitative Research for Educators*. Consideration of traditional and evolving qualitative methods and literature that apply to doctoral study of problems in teaching, school leadership, and school change. Prereq.: None. 3 s.h. (Change in prerequisite)

FOUN 8110 *Theories of Inquiry*. 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. Prereq.: Doctoral admission and FOUN 6901. 3 s.h. Pg. 221 (Drop a 6900 or higher level course)

FOUN 8114 Advanced Research Design and Statistics. An in-depth treatment of the major correlational, experimental, and quasi-experimental 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. Prereq.: FOUN 8110. 3 s.h. Pg. 221 (Drop a 6900 or higher level course)

EDAD 8100 Professional Skill Development Seminar. A doctoral student induction program, which includes intensive writing, research, and technology strands. The purpose is to assess the student's abilities as a doctoral student and begin the appropriate strategies necessary for successful completion of the doctoral program. Prereq.: Admission to the doctoral program. 3 s.h. Pg. 212 (Drop a 6900 or higher level course)

## **GEOLOGICAL AND ENVIRONMENTAL SCIENCES**

Jeffrey C. Dick, Chair  
2119 Moser Hall  
(330) 941-1756  
jcdick@ysu.edu

Environmental Science

2014-15:63            GEOL 4810/5810. *Groundwater Resource Evaluation*. 3 s.h. 2(Add new swing 5800 level course)

## **INDUSTRIAL AND SYSTEMS ENGINEERING**

6910 Design and Analysis of Experiment. Introduction to the principles of experimental design, the analysis of variance method, the difference between fixed and random effects and between nested and crossed effects, and the concept of confounded effects. The designs covered include completely random, randomized block, Latin squares, split-plot, factorial, fractional factorial, nested treatments and variance component analysis, response surface, optimal, Latin hypercube, and Taguchi method. 3s.

## **MANAGEMENT**

Rangamohan V Eunni, Chair  
Williamson Hall  
(330-941-7180  
rveunni@ysu.edu

MGT 6944 Managing Business Processes. Participants will learn techniques and develop capabilities that will facilitate the management of business processes through the examination of product design and selection, plant layout, aggregated planning, scheduling and quality control. Prereq.: MGT 6926 or MGT 6916. 2 s.h. (Change in prerequisite)

MGT 6975 Strategic Management. With an emphasis on problems of executive management, decision making, and administrative action, participants will develop strategic thinking capabilities through an examination of the design, implementation, and evaluation of business strategy and policy. Prereq.: FIN 6923, MGT 6930, MGT 6944, MKTG 6975 or FIN 6921, MGT 6900, MGT 6921, MKTG 6942. Must be taken concurrently with MGT 6976. 2 s.h. (Change in prerequisite)

MGT 6945 *Business Process Integration*. This course examines the forces driving enterprise integration as well as the management decisions associated with the design and implementation of enterprise systems. Students successfully completing this course will have a thorough understanding of enterprise integration as well as practical experience configuring and using SAP/ERP, the leading enterprise resource planning system. Prereq.: FIN 6902. 2 s.h. (Change in course hours and prerequisite)

MGT 6946 *Supply Chain Management*. This course covers a number of supply-chain related topics including: Inventory Models (consumption-based planning), Advanced Purchasing exercises, MRP, and Repetitive Manufacturing. Prereq.: MGT 6944 2 s.h. (Change in course hours and prerequisite)

## **MARKETING**

Bruce D Keillor, Chair  
Williamson Hall  
330-941-1894



bdkeillor@ysu.edu

MKTG 6975 Applied Marketing Strategy. Through applied learning experiences, students develop abilities to analyze markets, plan, design and implement effective marketing strategies in the areas of product, promotion, pricing, and distribution. Emphasis is on the integration of the marketing function with other business activities. Prereq.: MKTG 6943 or MKTG 6900. 2 s.h. (Change in prerequisite)

## MATHEMATICS AND STATISTICS

Angela Spalsbury, Chair  
Lincoln Building  
(330) 941-1803  
aspalsbury@ysu.edu

### MATHEMATICS

MATH 6957 Partial Differential Equations. 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 3720 or equivalent. 3 s.h. (Add 6900-level course)

MATH 6948 *Linear Models*. A study of linear statistical models of the relationship between analysis of variance and regression and the assumptions underlying the analysis of variance. Prereq.: MATH 3720 Linear Algebra and Matrix Theory and either MATH/STAT 5844 or 6944, or permission of graduate coordinator. 3 s.h. (Change in course title and description)

## PHYSICAL THERAPY

Nancy Landgraff, Chair  
B311 Cushwa Hall  
(330) 941-2703  
nlandgraff@ysu.edu

2014-15:6 PHYT 8931 *Specialty Applications* (Drop 8900-level course)

## PUBLIC HEALTH

Keisha Tyler Robinson, YSU Program Coordinator  
Cushwa Hall  
(330) 941-1901  
ktrobinson@ysu.edu

Amy Lee, CEOMPH Program Director  
Division of Community Health Sciences  
NEOUCOM  
(330) 747-2247, ext. 6179 or (330) 325-6179  
afl@neoucom.edu

MPH 6909. Public Health Research and Evaluation. 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 6904. 3 s.h. (Add 6900-level course)

MPH 6908 Public Health Practice and Issues. 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. (Change in prerequisite)

## **SOCIAL WORK**

Dennis Morawski, Chair  
3034 Cushwa Hall  
(330) 941-3774  
dpmorawski@ysu.edu

SCWK 7008 Social Work and the DSM. 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. Prereq.: concurrent with SCWK 7009 3 s.h. (Change in course title and description)

## **SOCIOLOGY AND ANTHROPOLOGY**

Matt O'Mansky, Chair  
444A DeBartolo Hall  
(330) 941-1688  
meomansky@ysu.edu

### GERONTOLOGY

GERO 7094 Selected Topics. 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. 1-3 s.h. (Add 6900-level course)

## **TEACHER EDUCATION**

Marcia Matanin, Chair  
2321 Beeghly Hall  
(330) 941-3652  
[mjmatanin@ysu.edu](mailto:mjmatanin@ysu.edu)

### TEACHER EDUCATION

TCED 6936 Curriculum, Assessment, and Instruction to Improve Learning. 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. 3 s.h. (Change to course title and description)

TCED 6922 Principles of Instruction. Differentiated instruction is a teaching philosophy that provides consideration for all students. Rather than promoting the traditional 'one size fits all' teaching model. Students will explore the research, determine effective instructional practices and develop teaching materials and activities with regard to content, process and assessment. This instructional framework is designed to meet the needs of diverse student abilities, ensuring that all students can learn. Prereq.: None. 3 s.h. (Change to course description)