

# GRADUATE CATALOG

2018-2019



**YOUNGSTOWN  
STATE UNIVERSITY**



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# GRADUATE CATALOG

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Youngstown State University Catalog  
Graduate Edition  
2018–2019

## Effective August 2018 Youngstown, Ohio

Youngstown State University reserves the right to change without notice any statement in this catalog concerning, but not limited to, rules, policies, tuition, fees, curricula, and courses.

Youngstown State University is committed to a campus environment that values all individuals and groups, and to nondiscrimination and equal opportunity for all persons. Youngstown State does not discriminate on the basis of race, color, national origin, sex sexual orientation, gender identity and/or expression, disability, age, religion or veteran/military status. Please visit [www.yzu.edu/ada-accessibility](http://www.yzu.edu/ada-accessibility) (<http://cms.yzu.edu/accessibility/electronic-information-technology-%E2%80%99Ceit%E2%80%9D-accessibility-compliance>) for contact information for persons designated to handle questions about this policy.

Inquiries regarding discrimination or harassment should be addressed to Youngstown State University's director of Equal Opportunity and Policy Compliance at (330) 941-2340.

Youngstown State University  
Graduate Catalog

Volume 86

EFFECTIVE AUGUST 2018

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

## College of Graduate Studies

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Telephone: (330) 941-3091  
Fax: (330) 941-1580  
[graduatecollege@ysu.edu](mailto:graduatecollege@ysu.edu)  
Salvatore Sanders, Ph.D., Dean, College of Graduate Studies



# UNIVERSITY MISSION

Youngstown State University—an urban research university—emphasizes a creative, integrated approach to education, scholarship, and service. The University places students at its center; leads in the discovery, dissemination, and application of knowledge; advances civic, scientific, and technological development; and fosters collaboration to enrich the region and the world.

## The University

- Creates diverse educational experiences that develop ethical, intellectually curious students who are invested in their communities;
- Provides access to a broad range of undergraduate programs;
- Offers graduate programs in selected areas of excellence, including those that meet the needs of the region;
- Supports economic development through applied learning and research;
- Integrates teaching and learning, scholarship, and civic engagement;
- Fosters understanding of diversity, sustainability, and global perspectives; and
- Advances the intellectual and cultural life of the city, region, and world.

## Youngstown State University Core Values

We—the faculty, staff, administrators, and students of Youngstown State University—hold the following values essential to achieving the University's mission:

### Centrality of Students

We are a student-centered institution committed to the education, development, well-being, and success of students of all ages and from all walks in life. In concert with our mission to help students grow intellectually, we strive to foster their personal, social, emotional, and career growth, as well as their capacities for lifelong learning, civic responsibility, and leadership.

### Excellence and Innovation

We value excellence and innovation inside the classroom and out. Thus, we strive:

- to integrate curricular and curricular activities to offer outstanding academic programs;
- to foster intellectual inquiry, exploration, and discovery to transcend traditional boundaries;
- to apply and perfect knowledge to encourage creativity;
- to provide effective tools, technologies, and facilities for learning; and
- to excel in research and scholarly activity, including the "scholarship of teaching and learning"—an area of research that explores how individuals teach and learn.

### Integrity/Human Dignity

As a campus community, we expect all conduct to be rooted in integrity, mutual respect, and civility. We value ethical behavior in scholarly and other endeavors; believe in the dignity and worth of all people; strive to foster an appreciation of, and respect for, differences among the human race; and celebrate the diversity that enriches the University and the world.

### Collegiality and Public Engagement

As scholar-citizens of many extended and interconnected communities, we pledge to work collegially and cooperatively to enrich the cultural environment; establish productive partnerships; provide responsible leadership; address community and workforce needs; foster sustainability; and bring about the greater good of the collective whole—be it the University, the city of Youngstown, the state of Ohio, the region, or beyond.

## YSU 2020 The Four Cornerstones

*YSU 2020: The Strategic Plan of Youngstown State University 2011–2020*, adopted by the YSU Board of Trustees in December 2010, is based on four critical guideposts, or "cornerstones":

### Accountability and Sustainability

Accountability and sustainability entail aligning the University's resources and investments to meet broad strategic goals and maintain institutional vitality.

### Student Success

Student success is defined as "academic achievement, satisfaction, and productive post-college performance."

### Urban Research University Transition

Youngstown State University contributes to the development and application of knowledge for the betterment of students and, thus, the communities in which they live and work. The University strives to improve the quality of life in the region and is the primary link to the global community. As an urban research university, YSU is guided by three core principles:

- Faculty research and scholarship are integrated into teaching and learning to improve graduate and undergraduate student experiences;
- YSU answers important questions and solves real problems by sharing information, expertise, and resources with the community;
- YSU invests in research, academic, and other programs that enrich the intellectual, cultural, and economic life of the community.

### Regional Engagement

Regional engagement refers to activities that enhance the quality of life, well-being, and economic development of communities in and around Youngstown and the surrounding region. YSU has a positive impact on the region through active mutual engagement, not merely by existence.

The YSU 2020 document and related web pages are available at YSU 2020 Strategic Plan. (<http://www.yzu.edu/ysu-2020>)

# HISTORICAL SKETCH

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

By the early 1920s, the Ohio Board of Education granted the School of Law the power to confer the Bachelor of Science in Law degree, and in 1924 the School of Commerce and Finance the right to confer the bachelor's degree in commercial science. The YMCA also offered courses to prepare teachers for certification, a program that evolved by 1927 into a separate school named Youngstown College and recognized by the State Department of Education.

That same year, the school also established the College of Liberal Arts. Throughout the 1920s, the schools of law and commercial science were called the Youngstown Institute of Technology, which began a move from downtown to the present location with the purchase of several mansions owned by the Wicks and other prominent Youngstown families.

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

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

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

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

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

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

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

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

- Beeghly College of Education
- Bitonte College of Health and Human Services

- Cliffe College of Creative Arts and Communication
- College of Liberal Arts and Social Sciences
- College of Science, Technology, Engineering, and Mathematics
- Williamson College of Business Administration

Degrees offered range from the associate, bachelor's, and master's to a Doctorate in Educational Leadership, a Doctor of Physical Therapy, and a Doctor of Philosophy in Materials Science and Engineering.

# ACCREDITATION

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Youngstown State University is accredited by the Higher Learning Commission (HLC) (telephone: (312) 263-0456 or (800) 621-7440). The HLC is an independent corporation that was founded in 1895 as one of six regional institutional accreditors in the United States. Please write to [info@hlcommission.org](mailto:info@hlcommission.org) ([hlcommission.org](http://hlcommission.org)) if you have any questions.

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

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

# ASSESSMENT

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

For more information, visit the **Office of Assessment**.



# DIVISION OF MULTICULTURAL AFFAIRS

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- Increase cultural awareness between diverse American and International students, faculty, and staff.

For more information, visit **Division of Multicultural Affairs** (<http://www.yosu.edu/multicultural-affairs>).

## Division of Multicultural Affairs

The Division of Multicultural Affairs reports to the President and is charged with the day-to-day implementation of diversity, inclusion, and multicultural affairs.

The major responsibilities of Multicultural Affairs are to educate the University and the community regarding diversity, multicultural affairs, and related issues as well as supporting and encouraging diversity initiatives. The division also conducts educational outreach programs and training in the areas of diversity and multicultural affairs.

We believe that a vibrant and diverse institutional climate is essential to providing effective delivery of services and instruction to diverse groups and in preparing them for a diverse and global society. YSU embraces a broad definition of diversity that is comprised of, but is not limited to, differences in cultural, social, economic, racial and ethnic origin, gender, religion, rural and urban communities, geographic origins, academic backgrounds, age, sexual orientation, gender identity and/or expression, ability or disability, physical appearance, personality, learning style, personal experiences, multilingual abilities, and veteran status. This diversity creates a richness that enhances the campus climate.

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## Chief Diversity Officer/Associate Vice President

The Chief Diversity Officer works in partnership with the President and senior leadership in advancing diversity and multicultural competence that will foster inclusion and cultivate diverse multicultural interactions among administrators, faculty, staff, students, and the region.

## Mission of Division of Multicultural Affairs

- Create a Culture of Community.
- Cultivate an environment that is inclusive.
- Educate the university community on the importance of diversity in our teaching and learning, curriculum, assessment, climate, environment, advising and student success, and campus-community connection.
- Collaborate with University departments and community businesses, organizations, agencies, etc. as a resource in developing diversity programs and activities that promote a better understanding of the diverse nature of the region.
- Administer the daily operations of the Multicultural Center.

## Multicultural Center

The Multicultural Center accommodates the staff of the combined offices: Division of Multicultural Affairs (DMA) and International Programs Office (IPO); and has two Interfaith Meditation Rooms that are available Monday through Friday, 8 am - 5 pm.

The Multicultural Center speaks to the university's commitment to value and serve all people through inclusive practices within the campus community and beyond.

## Mission of the Multicultural Center

- Provide an inclusive environment for all (students, staff/faculty and administrators, and visitors).
- Encourage and facilitate meaningful interaction through conversation, meetings, projects, coffee hour, etc.

# OFFICE OF EQUAL OPPORTUNITY AND POLICY DEVELOPMENT

## Office of Equal Opportunity and Policy Development/Title IX Compliance

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

The Office of Equal Opportunity and Policy Development (EOPD) is responsible for the review and development of University policies and for University compliance with state and federal equal opportunity laws and regulations, including Title VII of the Civil Rights Act of 1964 and Title IX of the Education Amendments of 1972. This responsibility includes:

- Development and implementation of the University's Affirmative Action Plan.
- Development of University Policies.
- Provision of training and educational programs in the areas of affirmative action, equal employment, discrimination, and harassment.
- Investigation of complaints of discrimination or harassment, including student complaints of sexual harassment, discrimination, dating violence and domestic violence, whether involving faculty, staff, students, or third parties.

### Director Office of EOPD:

Cynthia Kravitz, Esq.  
Youngstown State University  
One University Plaza, Tod Hall-Room 301  
Youngstown, Ohio 44555  
Telephone 330-941-2340 or -2216  
Fax 330-941-2394  
cakravitz@ysu.edu

### TITLE IX DIRECTOR:

Kelly Beers  
One University Plaza, Tod Hall Room 310  
Youngstown, Ohio 44555  
Telephone (330)941-4629  
Fax (330) 941-2394  
kbeers@ysu.edu or TitleIX@ysu.edu (titleix@ysu.edu)

The Title IX Director oversees the investigation and disposition of student complaints of sex/gender based discrimination and harassment, including complaints involving dating violence, domestic violence, stalking and sexual assault. The Director of the Office of EOPD, Cynthia Kravitz, serves as the Title IX Deputy Director and can also be contacted regarding any Title IX questions or complaints.

For more information please see the University's Equal Opportunity and Policy Development website (<http://cms.ysu.edu/administrative-offices/equal-opportunity-and-policy-compliance/equal-opportunity-and-policy>) and the Title IX website (<http://cms.ysu.edu/title-ix/title-ix-home>).

**Disability Services/Inquiries:** For information regarding disability services, including reasonable academic and workplace accommodations, please contact:

**For Students:** Gina McGranahan, Assistant Director of Disability Services

One University Plaza, Kilcawley Center Room 2082  
Youngstown, Ohio 44555  
Telephone (330) 941-2090 or glmcgranahan@ysu.edu

### For Employees and others, Title II/Section 504 Coordinator:

Allan Boggs, Interim Chief Human Resources Officer  
One University Plaza, Tod Hall Room 359  
Youngstown, Ohio 44555  
Telephone (330) 941-2160 or Alboggs01@ysu.edu

# GRADUATE DEGREES GRANTED

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## Graduate Degrees Granted

- Doctor of Education,
- Doctor of Philosophy,
- Doctor of Physical Therapy,
- Educational Specialist,
- Master of Accountancy,
- 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

# STUDENT SUPPORT SERVICES

## Center for Student Progress

### **Academic Coaching Services**

The Center for Student Progress (CSP) Academic Coaching Services offers professional academic coaching to assist students on a one-on-one basis with strategies for college success. An academic coach is your go-to person for college success. Coaches partner with you to help you understand the "why" and the "how" of learning. Together, you and an academic coach can figure out what's holding you back from being successful and create better study tools to move you ahead. A coach can also help you tackle common academic concerns like managing your time, reducing procrastination, setting goals, performing better on tests, reducing test anxiety, and changing your mindset.

Visit Center for Student Progress Academic Coaching Services (<https://www.yсу.edu/center-for-student-progress>) for more information or call (330) 941-3538.

### **Adult Learner Services**

The Center for Student Progress Adult Learner Services assists adult students in making the transition to and graduating from college. Adult students are defined as those who are 25 years of age or older or who have been out of school four years or more. The CSP/Adult Learner Services provides academic and personal support both individually and through programming with services such as:

- Academic Coaching
- Starfish Early Alert warning progress reports
- Time management and goal setting for adults

Visit Center for Student Progress Adult Learner Services (<https://www.yсу.edu/center-for-student-progress>) for more information or call (330) 941-3538.

### **Disability Services**

The Center for Student Progress Disability Services provides students, faculty, and staff with assistance and information regarding accommodations for students with disabilities, either permanent or temporary. Compliance with the Rehabilitation Act of 1973 and the Americans with Disabilities Act as amended in 2008 involves providing reasonable accommodations to qualified individuals with disabilities. These accommodations are provided in order to ensure equal access to people with disabilities regarding educational opportunities, programs, and activities.

The Center for Student Progress Disability Services addresses the needs of students with disabilities. Support for academic success includes:

- Serving as the gateway for accommodations for YSU students with disabilities
- Providing accommodation information
- Collaborating with faculty/staff regarding issues involving students with disabilities
- Arranging for classroom accommodations for students with disabilities to allow equal educational access
- Making campus referrals/connections

To inquire about receiving disability services, please contact the office at (330) 941-1372 (voice), (866) 757-1353 (video), or (330) 941-7470 (fax). A confidential appointment will be set up to discuss accommodation needs. The CSP/Disability Services is located in Kilcawley Center/2nd Floor.

Visit Center for Student Progress Disability Services (<https://www.yсу.edu/center-for-student-progress/disability-services>) for additional information or call (330) 941-1372.

### **Student Tutorial Services**

The Center for Student Progress Student Tutorial Services provides support for academic success by offering:

- Academic support in a variety of lower and upper division courses
- Appointments are scheduled on first come, first served basis
- Students meet weekly at the same time/day with same Peer Tutor
- Tutors offer review sessions for exams
- Emphasis on clarifying content, providing opportunities to practice, and developing independent learning, critical thinking and problem-solving skills.

Visit Center for Student Progress Student Tutorial Services (<https://www.yсу.edu/center-for-student-progress/tutorial-services>) or call (330) 941-7253.

### **Supplemental Instruction Services**

The Center for Student Progress Supplemental Instruction Services (SI) offers academic support through a series of weekly guided review sessions for students enrolled in selected courses to assist students in doing their best. Features of these review sessions include:

- Regularly-scheduled, weekly review sessions to guide students in course content and learning strategies.
- Peer-led by an experienced and successful student, who has been trained to facilitate learning through collaborative activities that integrate study skills.
- Free, voluntary, and open to all students in selected courses.
- Students review with classmates, compare notes, discuss important concepts, and develop strategies for studying the subject.

For additional information, visit the Center for Student Progress Supplemental Instruction (<https://www.yсу.edu/center-for-student-progress/supplemental-instruction>) or call (330) 941-3538.

## **Office of College Access and Transition**

The Office of College Access and Transition (OCAT) ensures students have the resources and support they need to prepare for, transition to, and graduate from college. OCAT's Access programs focus on high school students.

The College Credit Plus (<http://cms.yсу.edu/administrative-offices/ocat/college-credit-plus>) program offers dual enrollment to college-ready high school students. Academic Achievers and Upward Bound are intensive programs focused on students at Warren G. Harding and Youngstown City Schools, respectively. OCAT's Transition services target first-generation and multicultural students including African American, Hispanic, Asian American, and Native American students, and students admitted with restrictions. Our staff supports students through:

- Academic support and Learning Communities
- Mentoring
- Workshops and transition programming
- Campus and community referrals and connections
- Support and resources for minority students
- Summer Bridge and Bridge and Beyond
- Advanced Job Training
- College Tech Prep

For more information, visit the Office of College Access and Transition (<https://www.yсу.edu/ocat>).

## **Mathematics Assistance Center**

The Mathematics Assistance Center (MAC) is an academic support service integrated within the Department of Mathematics and Statistics. Its mission is to offer YSU students assistance in the strengthening of their fundamental

mathematical skills necessary for success in the study of mathematics and statistics. This mission is accomplished through services provided such as peer tutoring and the provision of resource materials for independent study.

The MAC has various services available to currently enrolled YSU students. These include:

- Drop-in peer tutoring
- Support for online homework
- Support for ALEKS placement
- Exam review sessions
- Study areas for independent learning
- Access to mathematical and statistical software (MATLAB, SPSS and R)
- Access to textbooks and solution manuals
- Access to formula sheets and other course-related supplements

The main service, drop-in peer tutoring, is provided to YSU students currently enrolled in mathematics and statistics courses ranging from introductory statistics, quantitative reasoning, and college algebra through calculus. The other services are provided as needed and as resources permit.

The Mathematics Assistance Center operates on a **walk-in** basis during its regular business hours (listed below) at its location in Room 408 of the Lincoln Building. The staff of the MAC consists of a coordinator, graduate teaching assistants, undergraduate tutors, student office assistants, and other student personnel.

For additional information, contact the Mathematics Assistance Center at (330) 941-3274. Hours for fall and spring semesters are as follows: Monday through Thursday, 9:00 a.m. to 6:00 p.m., and Friday, 9:00 a.m. to 3:00 p.m. For assistance during summer terms, call the MAC to inquire about its hours of operation. For more information, visit the Mathematics Assistance Center (<http://cms.yсу.edu/mathematics-assistance-center/math-assistance-center>) website.

## The Writing Center

The YSU Writing Center is operated by the Department of English to provide individualized instruction in writing for all students. The goal of the Center is to help clients become more independent, confident, and successful writers. The Writing Center staff includes faculty, graduate assistants or interns, undergraduates, and a full-time coordinator.

Services include one-to-one feedback on any writing task, at any stage, for any course, as well as peer-group reviews, workshops, and access to instructional handouts. The services offered by the YSU Writing Center are free of charge to all registered YSU students.

The Writing Center is located on the lower level of Maag Library, Room 171. Writing Center hours are Monday through Thursday 9 a.m. – 5 p.m., and Friday 10 a.m. – 1 p.m. Students can schedule appointments through WConline (<https://ysu.mywconline.com>). Consultants are also available for walk-in sessions on a first-come, first-served basis. Evening, weekend, and satellite hours at Stambaugh Stadium and the Veterans Resource Center vary by semester.

For more information about the Writing Center, please call (330) 941-3055, visit the Writing Center (<https://www.yсу.edu/writing-center>) website or e-mail [wcenter@ysu.edu](mailto:wcenter@ysu.edu). Appointments outside regular hours, online advice for distance learning students, and extended sessions for papers longer than 10 pages (i.e. capstone projects) can also be arranged.

## Reading and Study Skills

The Reading and Study Skills course instruction focuses on improving reading rate and comprehension as well as enhancing strategies for studying at the college level. Staffed by instructors and undergraduate peer tutors, courses include RSS 1510A Advanced College Success Skills, RSS 1510B Basic College Success Skills and RSS 1510C STEM Advanced College Success Skills and

students may be mandated to take those classes based on the COMPASS® Reading Test (CRT).

For more information about the Reading and Study Skills courses, telephone (330) 941-3307, in the Department of Counseling, School Psychology and Education Leadership in the Beeghly College of Education.

## Maag Library

The six-story William F. Maag Library is an attractive, comfortable, yet technically advanced environment for study and research at the center of the YSU campus. Maag Library provides comprehensive information services as well as access to information in print, analog, micro and digital formats. A professional staff provides in-depth assistance in a wide variety of disciplines. Maag Library is open for on-site use more than 80 hours per week during the term. Virtual access to library services, the on-line catalog, and direct digital information resources is available via MaagNet, providing constant access from home or office.

Maag Library is a member of OhioLINK, a statewide library and information network linking the libraries of all of Ohio's public and private colleges and universities. OhioLINK provides straightforward, easy access to a combined collection of over 39 million items. The vast majority of this state-wide collection is open to patron-initiated borrowing with rapid delivery to any member site. The network also provides access to over 100 indexing and abstracting databases in a wide variety of disciplines and direct access to the full text of over 8,000 scholarly journals. OhioLink currently provides direct Internet access to a wide variety of audio, visual, and primary-source materials.

Maag Library itself offers instructional and research materials in books, periodicals, microforms, CD/DVD, and sound recordings to a combined catalog of over 1.5 million records. These holdings number close to 100,000 government documents (with access to millions on-line), 700,000 bound volumes, and 900,000 microforms. Periodicals, microforms, and micro-readers are housed on the third floor. Copiers are available for self-service. User service points such as reference and circulation, as well as most staff offices, are conveniently located on the Library's entrance floor. The book collection is in open stacks, with split-level design between stack and reading areas. Study rooms and carrels are located on five of the floors.

Maag Library houses contemporary computer workstations, connected to a high-speed network, located throughout the building. The fourth floor of Maag houses a general-purpose productivity computer lab that is open to faculty and students as many hours as the library is open. Moreover, laptop computers with wireless network connections can be checked out for use anywhere in the library. In addition, any YSU faculty, staff or student with a wireless device is able to connect to the Maag wireless hubs.

Two group study rooms on the fourth floor offer unique accommodations including multiple presentation viewing for laptops and improved wireless connections. Rooms can be checked out at the circulation desk.

In 2004, Maag Library initiated the development of the Archives and Special Collections unit. Located on the fifth floor of Maag, this unit not only collects and preserves documents detailing the history of YSU and its environs but also is developing the capacity to provide searchable Internet access to its entire collection. The Maag Multi-Media Center on the third floor contains over 20,000 phonograph recordings, audio and video tapes as well as audio and data disks. The collection is strong in recordings of opera, jazz, and the collected works of J.S. Bach. A significant effort is currently underway to digitize most of the collection's analog recordings.

The Curriculum Resource Center (CRC) located in the Beeghly Hall College of Education is also a vibrant part of Maag Library, offering curriculum materials and support for students in education.

The lower level of Maag Library houses the Writing Center, Testing, and the English Language Institute.



## Information Technology Services

YSU's Information Technology Services (ITS) mission is to enable students, faculty and staff to create a technology-integrated approach to education, scholarship and service. The ITS Division includes five departments: Customer Services, Application Services, Infrastructure Services, Security Services and a Project Management Office.

The ITS Tech Desk is the primary point of contact for technology customer support needs and is located on the fourth floor of Maag Library. Support is provided by phone, in person and through the IT Services portal. The Tech Desk provides first-level technical support of all the YSU computer systems, telephones, classroom multimedia equipment, and assists students with password-related problems, helps students with installing "academic-related" software, and configuring their devices to connect to the YSU wired and wireless networks. More information is available at the Tech Desk (<http://cms.yсу.edu/administrative-offices/it-customer-services/tech-desk>) website.

Overall, ITS provides:

- Administrative and student systems including registration and finance
- Student Mobility Support through the Penguin Plug-in stations (Kilcawley and Moser Bridge)
- Desktop technology support in labs and offices
- Classroom technology support
- Wired and wireless networking and security
- Telephone technology support (desktop and cellular)
- Data Center infrastructure support
- Website technology support
- Electronics repair
- Academic technology support with a focus on multimedia classrooms

More than 5,000 online technology devices, including personal computers, printers, and multimedia systems are located on campus. Personal computers are available on campus for instruction and research. Currently, multiple Computer Labs exist within each of the academic and campus recreational buildings on campus. Selected classrooms are equipped to facilitate broadcast quality, full-motion video distribution, and distance-learning opportunities. The YSU Network provides faculty, staff, and students the opportunity to access networks and current-generation computer hardware and software via a high-speed state-of-the-art network infrastructure. A Virtual Private Network (VPN) is provided for secure remote access to campus. A campus-wide wireless network provides mobility for students and employees. AT&T Wi-Fi services are also available for visitors.

Detailed information on technology support and services is provided on the ITS (<http://cms.yсу.edu/administrative-offices/information-technology-services/its-home>) website.

## Laboratories

In addition to the Computer Center, Youngstown State University offers students a wide range of up-to-date laboratories and equipment across campus.

Located in DeBartolo Hall, the **Language Learning Resource Center** is a state-of-the-art foreign language lab facility designed for both classroom use and individual study in second-language acquisition and the study of foreign languages, literatures, and cultures.

The LLRC audio lab was completely renovated and remodeled in 2009. The new audio lab carrels are equipped with the most current digital Sanako hardware and software for language learning. The audio lab, which is reserved for foreign language study, has 30 student stations each equipped with Dell personal computers with CD-RW/DVD-ROM combo drives, Windows 7, and Tandberg Educational headphones. With Sanako, a digital audio or video file may be played back from a program track while students simultaneously record their response on the student track. The LLRC computer lab has an

additional 50 student Dell personal computers and is an open lab when not in use for a class. Student assistants are hired to assist with the various types of equipment and to tutor the languages taught at YSU.

In the **psychology laboratories**, located in the basement of DeBartolo Hall, students can learn basic techniques of experimental psychology, child psychology, social psychology, and survey research. Equipment includes an electromagnetically isolated room, animal housing areas, a child observation room, equipment for the control of animal behavior, and various physiological recording devices.

The **anthropology and archaeology laboratory** has a wide range of specialized equipment including:

- standards for the parameters of a biological profile (age, sex, ancestry and stature)
- statistical analysis packages for biological anthropology research
- anthropometry instruments
- archaeology research tools

The **Department of English has eight computer labs** in DeBartolo Hall primarily for the use of students enrolled in English composition and professional and technical writing classes, one lab for journalism classes in Fedor Hall, and one lab for composition classes and Writing Center use in Maag Library.

Computer facilities in the new **Williamson Hall** include three networked computer labs, a Financial Service Lab, and Professional Sales Lab. Specialized software used in business courses is also available.

In **Cushwa Hall**, laboratories are provided for radio broadcasting, physical therapy, dental hygiene, microbiology, nursing, criminal justice, respiratory care, human ecology, medical laboratory technology and science, clothing and textiles, medical assisting, emergency medical services, and polysomnography.

Laboratories in **Moser Hall** are described in the College of Science, Technology, Engineering, and Mathematics section of the catalog.

For more information, visit the **Campus Computer Labs**.

## YSU Bookstore

The YSU Bookstore, located at its new location at 300 Fifth Avenue, is YSU's only official bookstore. The YSU Bookstore is your source for all of your course needs. We know textbooks play a huge role in your success so we work hard to make them affordable!

Take advantage of the services the YSU Bookstore has to offer to help you save on textbooks: free reservation (pick-up) service for textbooks, rentals on just about every textbook, discounted used textbooks, price matching to Amazon.com and BarnesandNoble.com (some exclusions do apply), eBooks, and a book buyback program that pays you cash for books!

You will receive assistance from our recognizable and friendly staff with over 100+ years of combined bookstore experience. The YSU Bookstore is not just about textbooks – it offers a wide array of quality YSU official apparel, gifts, supplies, and a brand new cafe!

Students, alumni, and friends can shop anywhere anytime, including from their mobile phones.

For more information, visit the YSU Bookstore (<http://ysu.bncollege.com>) website, or download our app (My College Bookstore in both the App Store and Google Play).

## Comprehensive Testing Center

The Comprehensive Testing Center is a part of the Division of Student Affairs. Among the testing services provided are administrations of national admission and certification examination. These include:

- American College Test (ACT)
- Graduate Record Exam (GRE) Subject Test
- Miller Analogies Test (MAT)
- Law School Admissions Test (LSAT)
- PRAXIS exam

Additionally, YSU's computer-based placement testing is administered through this office. Placement tests are administered year-round in both group and individual sessions.

General and vocational-interest examinations for guidance purposes are available on campus. Current YSU students wishing to take such tests may make arrangements with the University's Career and Counseling Center. For more information visit the Testing Center (<http://cms.ysu.edu/administrative-offices/testing-center/testing-center>) website.

## International Programs

International Programs (<http://cms.ysu.edu/administrative-offices/center-international-studies-and-programs/cisp-home>) is an integral part of the Division of Academic Affairs and is responsible for coordinating the international dimensions of the university, including international student and faculty services, study abroad and exchange programs, and the English Language Institute. For more information on studying abroad and about the English Language Institute (<http://cms.ysu.edu/administrative-offices/english-language-institute/eli-home>), visit the website.

## International Student and Faculty Services

CISP coordinates international student recruitment and admission, the international student health insurance program, and the Stephen and Brigitta Hanzeley International Student Scholarship. The CISP also provides immigration-related services for international students, faculty, and staff. For more information about requirements for enrolled international students, see Requirements for Nonimmigrant Students (located under the Credit Hours/Class Standing/Majors section of the catalog).

## International Student Association (ISA)

Originally founded in 1958 as the International Student Federation, the purpose of ISA is:

- To promote positive interactions among U.S. American and International students;
- To increase awareness of international cultures at Youngstown State University and in the Youngstown community;
- To be a place where international students can find common ground; and
- To support international students at Youngstown State University.

## University Housing

### Housing & Residence Life

YSU owns and operates five housing facilities for students:

- **Kilcawley House**, located on University Plaza
- **Lyden House** and **Cafaro House**, located on Madison Avenue
- **Wick House** and **Weller House**, located on Wick Avenue

On-campus options for students range from traditional residence hall facilities to apartment-style housing.

On-campus living provides students many advantages and opportunities. University housing facilities are structured environments. Each is a small community, and as such, has procedures and regulations addressing such things as noise, safety, guests and security. University residence halls have full-time professional staff and part-time student staff that oversee the operation of the halls and assist students with the challenges of daily college life. Each facility has state-of-the-art building security systems. On-campus living is a good place to get to know many students in a short period of time. Sharing bathrooms, lounge space, and corridors with a group means you can't help but make friends quickly. Being on campus also means that classes, the library, the student center, and the wellness center are never very far away.

For more information, see the Housing and Residence Life (<http://housing.ysu.edu>) website.

## Kilcawley House

Kilcawley House was constructed in 1965 and has undergone a complete renovation. This seven-story building can accommodate 224 students. Kilcawley residents live in double-occupancy rooms, complete with loft-style furniture, wall-to-wall carpeting, microfridge, Internet access, and plenty of flexible space. Rooms feature separate room-controlled heating and air conditioning. Lounges and study areas are available on each floor. A computer lab with Internet access is located in the basement. The basement also contains a TV lounge, a game room equipped with ping-pong and pool tables, a kitchen with vending machines, a 24-hour study area, and two music practice rooms. Its residents have the advantage of being located in the heart of the YSU campus and can use all of Kilcawley Center's facilities including a computer center, and copying service without going outdoors.

## Lyden House

When Lyden House opened, a new era began for on-campus housing at Youngstown State. The impressive five-story structure reflects a traditional collegiate gothic style with clean, contemporary lines. Lyden House, located just north of campus along Madison Avenue, houses 300 students. A typical student room is approximately 12' x 17' and houses two students. In addition to a bunk bed, which can be stacked, lofted, or separated, each student has a desk and chair, a dresser, a shelving unit and an armoire wardrobe unit. The furniture is uniquely designed to interchange to suit the individual student's tastes in personal decor.

Rooms also feature separate room-controlled heating and air conditioning units, microfridge, vertical window blinds, overhead lighting and tiled floors. Each room has high-speed Internet access. All rooms in Lyden are designed to be handicapped accessible.

Each wing of this beautifully designed residence hall includes convenient shower and restrooms, quiet study rooms, and comfortable conversation lounges. Students have full access to a kitchenette/vending area, fitness room, computer lab with Internet access and laundry facilities in the lower level of Lyden. A convenient parking area is also available adjacent to Lyden House.

## Cafaro House

Cafaro House is coed, housing 274 students. The facility, which opened fall 1995, houses participants in the University Scholars Program, BSMD program, and Honors College.

Enclosed suites rather than traditional rooms accommodate 4-18 residents, with individual rooms branching off each suite area to house two residents. One traditional hallway is located on the first floor. Each room has a microfridge and high-speed Internet access.

In addition to providing a variety of lounge and recreational spaces similar to Kilcawley and Lyden, this facility also has academic spaces such as a seminar room, computer lab, and music practice rooms.

## Wick House

Located on Wick Avenue next to the Arms Family Museum of Local History and near the Butler Institute of American Art, Wick House is a restored mansion that was at one time the home of the Wick family. This residence hall offers unique living spaces for 33 upperclass residents. Rooms vary in size and design, accommodating one to three residents, and several rooms offer private bathrooms. Rooms are furnished with microfridges, beds, desks, and wardrobes similar to those found in Lyden House.

Wick House provides a large lounge on the first floor and laundry facilities in the basement. Parking is available adjacent to the building.

## Weller House

Weller House is located along Wick Avenue next to Wick House. Weller House has also recently undergone a complete renovation and accommodates 17 graduate resident apartments.

Having opened in fall 1991, this facility offers apartment-style on-campus living, each unit having a full bathroom with tub and/or shower, a kitchen, high-speed internet access, an electric range, refrigerator/freezer, garbage disposal, full size bed and dresser, and a dining table. Apartments vary in size and are designed to accommodate a single student as well as a couple with children.

Weller also offers students a community room and convenient laundry facilities on the lower level.

## University Courtyard Apartments

Established in 2003, University Courtyard Apartments is an added addition to the student housing community, of which the apartments are an ideal option for YSU students wishing to live on campus and still have all the comforts of home.

In 2011, Youngstown State University, obtained ownership of University Courtyard Apartments. The community is located in the Wick Oval area, just minutes away from the center of campus and adjacent to Bliss Hall, home of the College of Creative Arts and Communication. The community is comprised of one, two, and four bedroom apartments and each apartment comes equipped with an appliance package that includes a full size refrigerator, stove, microwave and dishwasher. In addition, the units are fully furnished and equipped with ceiling fans and mini-blinds. Residents can take advantage of the planned activities, computer labs, study lounge, fitness center and recreation area in the courtyard that includes a basketball and volleyball court and grills. The rent is all-inclusive, which means the residents pay one amount for everything including all utilities, Wi-Fi, high-speed internet access and basic cable TV, and charges are assessed through the students portal account. University Courtyard Apartments provide an ideal way to "study hard and to live easy."

## Christman Dining Commons

The Christman Dining Commons serves students with an on-campus resident meal plan or on a per-meal cash basis. The Commons is located adjacent to both Lyden House and Cafaro House and is easily accessible from Elm Street, Madison Avenue, and Custer Street.

This gracious single-floor dining facility architecturally complements Lyden and Cafaro Houses, seats 300 and will serve over 600 per meal.

The Commons 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.

Various meal plans are also available to those current students not living in University-owned facilities.

This location is open to students, staff, and faculty, as well as members of the community are also welcomed.

## Application for Housing

Applications are available online at the Housing and Residence Life (<http://housing.yosu.edu>) website.

In order to be accepted for University Housing, a student must first be admitted to the University. Space is allocated on a first-come first-served basis. If you have not yet applied to the University, contact the Office of Admissions at (330) 941-2000.

## University Housing Partners

### Buechner Hall

Buechner Hall, a privately owned and operated women's residence hall, is located near the center of campus. Although this facility is not operated by University Housing, cooperation and regular communication ensure that the women residents are integrated into campus life.

Designed and built expressly for women, Buechner Hall is operated by the Buechner Foundation, a private, not-for-profit corporation, and is maintained by funds from the original bequest. The Foundation partially underwrites every resident's cost. Located on the YSU campus, Buechner Hall houses 72 women in single and double rooms. The air-conditioned rooms are completely furnished and are cleaned weekly by the housekeeping staff. The dining room provides 15 home-cooked meals a week and weekend cooking facilities are also available. The building has an elevator and sprinkler system, and laundry facilities on each floor. Staff and security guards provide maximum 24-hour security service. A beautiful and immaculately maintained building, Buechner Hall is conducive to a quiet study environment. It is located at 620 Bryson Street, Youngstown, OH 44502. Telephone: (330) 744-5361.

### Independent Living

Off-campus housing is an attractive option for many students. In the greater Youngstown area, there is a wide variety of apartments, houses, and rooms for rent at surprisingly reasonable rates. Much of this housing is within walking distance to campus so students without their own automobile are able to take advantage of it. Many students with transportation opt to live further from campus.

Whatever kind of housing you are interested in, please see options on our website at Housing and Residence Life (<http://housing.yosu.edu>).

### Lockers

Campus lockers are available in Bliss Hall, Moser Hall, and Cushwa Hall at a cost of \$25. A lock is provided by the university and is mandatory for the duration of use. The university assumes no responsibility for property stored in the locker, and all items must be removed at the end of each academic year. Details and rentals are available at the Penguin Xing located on upper level of Kilcawley Center or at (330) 941-3516.

content to come

## Student Activities

Youngstown State University offers a broad range of campus activities geared toward enriching and expanding the student experience beyond the classroom. Participating in student government, intramurals, student publications, art and music groups, and student organizations gives students opportunities to make new friends; meet people from backgrounds, cultures, and perspectives different from their own; develop leadership skills; and balance the demands of university life with the need for relaxation and recreation. Student

programming offerings include Welcome Week, Homecoming, YSU Serves Week, Diversity Programming Series, and other events throughout the year.

For more information visit the Student Activities (<http://cms.ysu.edu/administrative-offices/student-activities/student-activities>) page.

## Penguin Productions

Penguin Productions is a student group under the Division of Student Experience charged with assessing, initiating, implementing, and evaluating major events for almost 13,000 students on the campus of Youngstown State University.

Penguin Productions conducts campus-wide assessments of students' entertainment interests and identifies possible performers and venues. Performers such as Zac Brown Band, Judah & the Lion, Migos, and Andy Grammer have come to campus or the downtown Covelli Centre. Penguin Productions plans Fall Fire Fest and Federal Frenzy, two campus traditions.

Working with Penguin Productions carries no academic credit or pay, but participants get a behind-the-scenes look at events planning, concert staging, ticket management, and other concert business, including meeting the performers.

For more information about upcoming events or becoming a Penguin Productions board member, please call (330) 941-3575.

## Student Organizations

There are over 200 student organizations ranging from academic and social awareness to cultural, Greek, and Student Government. Students are invited to take the first step and discover something that engages their interests. Student organization mailboxes are located in the Student Activities Office, Kilcawley Center Annex.

The following is a partial list of the organizations available at YSU. A complete searchable listing of registered student organizations at YSU, is available on the Student Organization Directory (<http://cms.ysu.edu/administrative-offices/student-activities/student-organization-directory>) web page.

- African Student Union
- Alpha Kappa Alpha Sorority
- Alpha Phi Delta Fraternity
- Alpha Omicron Pi Sorority
- Alpha Xi Delta Sorority (AXD)
- American Institute of Chemical Engineers
- American Marketing Association
- American Society of Civil Engineers
- American Society of Mechanical Engineers
- Anthropology Colloquium
- Armed Forces Student Organization
- Black Student Union
- Bowling Club
- Campus Crusade for Christ
- Catholic Student Association
- Chi Alpha
- College Conservatives
- College Democrats
- Dana Flute Society
- Dana Guitar Association
- Dance Club
- Dance Ensemble
- Debate Club
- Delta Sigma Theta Sorority
- Delta Zeta Sorority
- Economics Club
- Emergency Medical Services Organization
- Enactus
- Exercise Science Club
- Film Club
- Guinathon
- Greek Campus Life
- Health Education and Physical Education Club
- Hospitality Management Society
- Institute of Electrical and Electronic Engineers
- Institute of Industrial Engineers
- Interfraternity Council
- InterVarsity Christian Fellowship
- Indian Student Association
- Italian Club
- Jazz Society
- Jewish Culture Club
- NEOMED
- National Alliance on Mental Illness on Campus
- National Pan-Hellenic Council (NPHC)
- Ohio Collegiate Music Educators Association
- Orthodox Christian Fellowship
- Panhellenic Council
- Pella Penguins
- Philosophy and Religious Studies Club
- Phi Mu Alpha Sinfonia (Music)
- Phi Sigma Rho Engineering Sorority
- Relay for Life
- Rookery Radio
- Room of Requirement
- Rotaract
- Saxophone Society
- Sigma Alpha Epsilon Fraternity (SAE)
- Sigma Chi Fraternity (SC)
- Sigma Tau Gamma Fraternity (STG)
- Society of Automotive Engineers
- Society of Human Resource Management
- Society of Women Engineers
- Sociology Club
- Spanish Club (Los Buenos Veciños)
- STEM Leadership Society
- Student American Dental Hygienists Association (SADHA)
- Student Athlete Advisory Committee (SAAC)
- Student Organization for Respiratory Care
- Student Physical Therapy Association
- Student Social Work Association
- Students in Dietetics
- Students In Fashion and Interiors
- Theta Chi Fraternity
- Urban Gaming Club
- Women in Science
- YSUnity SOGIE Society
- Zeta Tau Alpha Sorority
- Zeta Phi Beta Sorority



## Greek Life

Greek Life at YSU affords students the opportunity to gain leadership experience and develop a positive social outlet. There are 9 Interfraternity, National Pan-Hellenic Council, and Panhellenic groups from which to choose.

For more information visit the Greek Life (<http://cms.ysu.edu/administrative-offices/greek-life/greek-life>) page.

## Student Government Association

The student body of Youngstown State University is represented by Student Government, which operates under constitutional powers granted by the University. The legislative branch of Student Government is composed of representatives from the six undergraduate colleges and the School of Graduate Studies and Research, in proportion to the enrollment of each. All meetings of student government representatives are open to the student body.

Student Government exercises the power to conduct student elections, to recommend students to serve as members of joint faculty-student committees, and to supervise programs financed from its operating budget.

Student Government selects nominees for the two student positions of the University Board of Trustees.

For more information visit the Student Government (<http://sga.ysu.edu>) page.

## Student Media

The University supports multiple student media outlets. Students can showcase their talents through *The Guin*, a digital year book; *The Jambar*, a weekly newspaper; *The Penguin Review*, an annual literary magazine; *The Yo Magazine*, an annual magazine; and Rookery Radio, an online radio station.

Student media is student run. Policies and procedures concerning student publications are prepared, reviewed and applied by the Student Publication Committee.

## Department of Campus Recreation - Andrews Student Recreation and Wellness Center

The Department of Campus Recreation is located in the Andrews Student Recreation and Wellness Center. This state-of-the-art facility contains more than 140 pieces of strength and conditioning equipment. Located near the free-weight and cardio area is the Center's impressive rock wall, at 53 feet Ohio's tallest. Volleyball, basketball, and other activities are situated within the multi-purpose sports forum, which contains four courts. The spacious aerobic studios are home to many group exercise classes and are adjacent to the 1/8-mile indoor track, both on the top floor of the facility.

The Andrews Center also includes a tranquil meditation studio, full-functioning locker rooms, and the Wellness Resource Center. In addition to the Andrews Student Recreation and Wellness Center, the Department supervises programs in Beeghly Physical Education Center, Stambaugh Stadium, and the outdoor complexes (Farmer's Field and Harrison Field).

Participants must have a valid YSU ID card to use the facilities, equipment, services, and programs offered by the Department of Campus Recreation.

The Department is one of the most popular places on campus to be employed. If you are interested in applying for a position, please register for the Semesterly job fair at the department's or complete the department application, including a completed cover letter and resumé, which can be found online at Campus Recreation (<http://cms.ysu.edu/administrative-offices/campus-recreation-and-wellness/campus-recreation>).

For additional information about the Department of Campus Recreation, please contact (330) 941-3488 or visit the Campus Recreation website. (<http://>

[cms.ysu.edu/administrative-offices/campus-recreation-and-wellness/campus-recreation](http://cms.ysu.edu/administrative-offices/campus-recreation-and-wellness/campus-recreation))

## Campus Recreation Club Sports

The Club Sports program at Youngstown State University provides opportunities for students who desire a more in-depth sports experience than is provided in the Intramural and/or open recreation program. The focus of the Club Sports program blends the aspects of learning new skills, practicing with club members, and possibly competing with other clubs while continuing with your love of a particular sport way long after high school. It also provides a great opportunity to meet new people and become more involved with campus life at YSU. Broaden your college experience and create or join a Club Sport today. Don't see the club sport you want? Start your own. Contact Tessa Padilla in regards to starting your own team! Tessa Padilla at 330-941-2239 or by email at [tdpadilla@ysu.edu](mailto:tdpadilla@ysu.edu).

Current club sports include:

- Bass Fishing
- Bowling
- Clay Target
- Equestrian
- Fencing
- Hip Hop
- Ice Hockey
- Ice Skating
- Men's Lacrosse
- Women's Lacrosse
- Paintball
- Racquetball
- Rock Climbing
- Women's Rugby
- Soccer
- Swimming
- Tennis
- Ultimate Frisbee
- Men's Volleyball
- Women's Volleyball
- Wrestling

## Theatre and Dance

All students are encouraged to get involved in University Theatre, Dance and Film productions and classes. Opportunities exist for students to perform on stage, work in tech and Design areas as well as participate in student film productions. Auditions, Classes, and productions are regularly scheduled throughout the academic year. Please check out our Facebook page "YSU Department of Theatre and Dance" to find out about upcoming ways to get involved!

Membership in the Eta Phi chapter of Alpha Psi Omega, the country's largest and most active honorary dramatics society, is open to YSU students who distinguish themselves in both theatre and scholarship. Membership in dance ensemble is done by audition.

Major University Theatre productions are presented in Bliss Hall, the performing arts complex which contains Ford Theatre, a 400-seat standard proscenium theater, and the Spotlight Theatre. Besides accommodating major productions, the Spotlight Theatre also serves as a laboratory for student directed plays, various workshop activities and classroom activities.

With an emphasis on "learning by doing," YSU theatre and dance students apply classroom theories and techniques in numerous campus productions. An active guest-artist program has also brought them into working contact



with noted practitioners from the professional world. Participation in The Kennedy Center American College Theatre Festival and The American College Dance Festival offer undergraduate research opportunities to students.

For more information visit the Theatre and Dance (<http://www.ysu.edu/academics/college-creative-arts-and-communication/facilities/theater-and-dance>) page.

## Music

Many campus musical ensembles are open to all students of the University. For these, see the Dana School of Music in the College of Creative Arts and Communication section of this *Bulletin*.

For more information visit Dana School of Music (<http://www.ysu.edu/academics/college-creative-arts-and-communication/dana-school-of-music>).

## Art

Student and faculty art exhibitions, including two annual graduating BFA exhibitions, are held in the John J. McDonough Museum of Art on the YSU campus. The McDonough Museum also exhibits work of nationally and internationally known artists. The Butler Institute of American Art (<http://butlerart.com>), a private institution located in the midst of the YSU campus, sponsors two annual competitive exhibitions, the area annual and the national mid-year, to which students are encouraged to submit work. The Judith Rae Solomon Gallery, located on the 2nd floor of the College of Creative Arts and Communication's Bliss Hall, is used throughout the year for various student and faculty exhibitions, in addition to exhibitions of visiting artists. The Student Project Gallery located in the lower addition of Bliss Hall, is a space dedicated to give students opportunities to exhibit their artwork.

The Student Art Association sponsors an annual exhibition of the work of Youngstown State University students. The work is displayed at the McDonough Museum of Art (<http://www.ysu.edu/mcdonough-museum>) during the month of April, with awards given from various donors. Other area venues also exhibit student work, such as The Oakland Center for the Arts, Trumbull Art Gallery, and the Art Outreach Gallery at the Eastwood Mall.

For more information visit the Department of Art (<http://artdept.ysu.edu>).

## Intercollegiate Athletics

Intercollegiate athletics are conducted at Youngstown State University to meet the needs and interests of the entire student body as spectators or participants in healthful amateur sports. Tryouts are open to any student who qualifies under the Youngstown State University, NCAA, and conference eligibility regulations. Men's teams compete in intercollegiate baseball, basketball, cross country, football, golf, tennis and track and field. Women's intercollegiate teams compete in basketball, bowling, cross country, golf, soccer, softball, swimming and diving, tennis, track and field and volleyball.

The University's intercollegiate athletic programs are governed by the National Collegiate Athletic Association (NCAA).

Students are encouraged to participate as athletes, cheerleaders, trainers, managers or scorekeepers in any of the varsity sports. Students who want to try out should contact the head coach of the sport of interest in either Beeghly Center or Stambaugh Stadium.

See the **YSU Athletics** website for more information.

## Honorary Organizations

Honorary organizations related to academic fields and departments recognize outstanding achievement by University students. Many of these organizations are local chapters of national honor societies, which provide national recognition and local scholarships.

For more information on honorary organizations in your area of academic concentration, contact the faculty department chairperson of that area, or the Student Activities Office (<http://cms.ysu.edu/administrative-offices/student-activities/student-activities>), second floor, Kilcawley Center.

- Alpha Epsilon Delta - Honorary Premedical Society
- Alpha Kappa Mu - Historically African-American Honor Society
- Alpha Lambda Delta - Freshman Honor Society
- Alpha Phi Sigma - Criminal Justice Honor Society
- Alpha Psi Omega - Drama Honorary
- Beta Alpha Psi - Accounting and Finance
- Beta Gamma Sigma - Business
- Chi Sigma Iota - Counseling Honorary
- Eta Sigma Gamma - Health Education Honorary
- Golden Key - National Honor Society for achievement in all undergraduate fields of study
- Kappa Delta Pi - Education Honor Society
- Kappa Omicron Nu - Human Ecology
- Lambda Pi Eta - Communications Studies
- National Society of Collegiate Scholars
- Omega Chi Epsilon - Chemical Engineering
- Omicron Delta Kappa - Leadership
- Order of Omega - Greek Letter Honor Society
- Phi Alpha Theta - History Honorary
- Phi Epsilon Kappa - Physical Education
- Phi Kappa Phi - National Honor Society for achievement in all fields
- Pi Mu Epsilon - Mathematics Honorary
- Pi Sigma Alpha - Political Science
- Psi Chi - Honorary Psychology
- Sigma Alpha Lambda - National Leadership and Honors Organization
- Sigma Pi Alpha - Human Resource Management
- Sigma Theta Tau - Nursing
- Society for Collegiate Journalists
- Tau Beta Pi - Engineering Honor Society
- Theta Alpha Kappa - Religious Studies & Theology
- Upsilon Pi Epsilon - Computing & Information Disciplines

## YSU Annual Awards

The University has established a series of awards to recognize excellence and to encourage participation in campus life. The awards are presented annually at the Student Activities Awards Banquet in the spring. Each year students, faculty, and staff are invited to nominate outstanding individuals and organizations for these prestigious awards. Selections will be made by a committee composed of students, faculty, and staff. Details regarding this program and the different awards listed below may be obtained from the Student Activities Office.

### Cardinal Newman Service Award

The Cardinal Newman Award is given to a graduating senior who, through service to the Newman Center, Catholic Student Association, the Youngstown State University as a whole, and to the wider community, has embodied Cardinal Newman's motto, thus allowing their own feats to be spoken to others in service and in recognition of the responsibility we each have to care for our neighbor.

### Constellation Award-Outstanding University-wide Programs

This award recognizes an outstanding University-wide event sponsored by a registered YSU student organization. The program must be distinguished by

its inclusion of the University community and the program's contribution to the quality of student life.

### **DeCrane-Houser Award**

Scholarship for a student who has been active at the Newman Center. It is in honor of Arthur DeCrane, who was the first Catholic campus minister for Youngstown College and also for the late Judge William Houser, who was active in the Newman Center while going to school here. Judge Houser's family donated a large sum of money to make this scholarship available upon his death.

### **Emerging Leaders Program**

The Emerging Leader Program provides sophomore students with an opportunity to develop and refine the knowledge and skills essential to leadership. Students who complete the program receive designation on their official University transcript, cords for their academic regalia, and a YSU Leadership pin.

### **Gillespie-Painter Award**

To recognize outstanding achievement in support of the Division of Student Affairs at YSU beyond the scope of assigned duties. All members of the Division of Student Affairs are eligible for this award.

### **The John J. Gocala Service Award**

The John J. Gocala Service Award was established by the Student Government Association during the 2008-09 academic year to recognize the commitment and contributions of John J. Gocala during his tenure as YSU Police Chief.

The intent of the award is to recognize one individual within the university community who has gone above and continues to go above and beyond the call of duty to serve the first-class reputation and traditions of Youngstown State University.

The individual must truly work to preserve the best interests of the YSU campus and community.

### **Kocinski Award**

The Kocinski Award is given in honor of Marilyn Kocinski, who taught dance at YSU in the Department of Human Performance and Exercise Science from 1960 to 1983.

Her family was responsible for instituting the award in the late 1990s in her memory. The award is presented to a senior student who has played a significant role as a student leader in the YSU Dance Ensemble and who demonstrates academic integrity as well as artistry and creativity in the field of dance.

### **Libra Award-Outstanding Advisor**

The Libra Award is presented to the outstanding faculty/staff advisor of a registered student organization. The award is designed to recognize the contributions and commitment to furthering student leadership development made by advisors.

### **Dr. Martin T. "Marty" Manning Award**

The Martin T. "Marty" Manning Award, established during the 2010-2011 academic year by the Student Government Association, is in honor of the late Dr. Martin T. "Marty" Manning. The award is in recognition of the superior student mentoring of Dr. Manning.

The award is given to a full- or part-time student, administrator, faculty or staff member, or alumnus/a who has exemplified the student-mentoring capacity that Dr. Manning so consistently displayed throughout his Youngstown State University career.

### **Dr. Charles A. McBriarty Award**

This award was established by Student Government during the 1992-93 school year to recognize and remember the commitment and contributions to students and student services by Dr. Charles McBriarty during his tenure as Vice President for Student Affairs. Its intent is to recognize individuals within the university community who have a reputation for being exceptionally student-oriented and who possess the traits, ethics, and friendly style exhibited by Dr. McBriarty.

### **Edna K. McDonald Cultural Awareness Award**

Award to recognize an outstanding individual who has made a lasting contribution to encourage and increase awareness of cultural diversity at Youngstown State University. All faculty, staff, students, and members of the extended YSU community are eligible for the award.

### **THE HARRY M. MESHEL LEGACY AWARD**

The Harry M. Meshel Legacy Award, established during the 2017-2018 academic year by the Student Government Association, is in honor of the late Mr. Harry M. Meshel. An influential political figure, Mr. Meshel made immense contributions to the valley that simply cannot be measured. This award is in recognition of the values of: public service, civics, education, culture, and dedication to one's hometown, each of which he brilliantly possessed.

This award is bestowed upon a Youngstown State University student, who may or may not be a member of the Student Government Association. The individual must have displayed the qualities Mr. Meshel encompassed, specifically the commitment to public service for the Greater Youngstown Community.

### **Mentor of the Year**

This award honors the faculty or staff mentor who has contributed the most during the past year to the development of a YSU student.

### **Multicultural Student Services Leadership Award**

The Multicultural Student Services Leadership Award recognizes up to two minority students served through the Center for Student Progress who have achieved academic success and demonstrated effective leadership in promoting cultural awareness to the campus and community.

### **Nova Award-Outstanding New Student Organization**

Recognizes a newly registered student organization exhibiting initiative in organizational development and strong potential to contribute to the quality of life as a recognized student organization at Youngstown State University.

### **Orion Award-Outstanding Student Organization**

The Orion Award recognizes an exceptional student organization for its outstanding leadership and service to the University community during the current academic year.

### **President Cynthia E. Anderson Lifetime Achievement Award**

Awarded to a full-time student who has exhibited an extended commitment and dedication to serving the student body through various positions on Student Government.

### **Sirius Award-Student Employee of the Year**

This award recognizes student employees who have made outstanding contributions to their employers and demonstrated skills and commitment above and beyond expectations.

### **Smith-Murphy Award**

The award shall be given to one full-time faculty member each year. The recipient shall possess the qualities of Lester Smith and Gratia Murphy and

display a genuine concern for the well-being and success of the students he or she teaches.

### Student Government Spirit Award

Given by Student Government to a member of the campus or Youngstown metropolitan community who has displayed enthusiasm for the work of YSU Student Government over the past academic year.

### Student Service Award

To recognize an outstanding individual who has demonstrated exceptional commitment to the students of YSU. All faculty, staff (excluding the Divisions of Enrollment Planning and Management, Student Experience, and Student Success), and members of the University community are eligible for this award.

### Gina Tenney Memorial Scholarship

Gina Tenney was one of YSU's best and most dedicated students. Before her tragic death in 1985, Gina had been actively involved in campus life and had achieved excellent academic standing. She served in Student Government and was a student assistant in the Student Services Office. She was also active in the University Theatre Department. In honor of Gina's memory, the Gina Tenney Memorial Scholarship Fund was established in January of 1986 by the YSU Student Government.

### YSU Pin

Begun 70 years ago, in 1948, the YSU pin recognizes up to five graduating seniors who have achieved academic success and demonstrated outstanding leadership, motivation, and creativity in University and community activities.

### The Luke N. Zaccaro Award

The Luke Zaccaro Award is given to a YSU student who may be a member of Student Government. The individual should have done something exceptional for the university, Student Government, or fellow students during the course of the current year.

## Other Awards and Prizes

### YSU Leadership Scholarship

The YSU Leadership Scholarship recognizes outstanding students for their contribution to and leadership in campus activities. Each year up to seven students are awarded \$600 for Fall tuition and fees.

### The Greek Campus Life Awards for Scholarship

Given annually to the fraternity and sorority chapter with the highest aggregate point index and to the member of a fraternity with the highest individual point index, based on the academic work of the previous two semesters. The awards are presented during the spring semester at the annual Greek Sing competition.

### Who's Who Among Students in American Universities and Colleges

A list of upper-class students and graduate students achieving outstanding academic and curricular records.

## Student Conduct

### Student Conduct

Students at YSU have an obligation to conduct themselves in a manner that is compatible with the University's purpose as an institution of higher education. The policies and regulations in *The Student Code of Conduct* have been established to ensure a positive educational experience for every student. Each student is expected to be fully acquainted with all published policies, procedures, and regulations of the University and is held responsible for compliance with them. Therefore, all students should take time to familiarize

themselves with *The Student Code of Conduct*, residence hall policies, university lease agreements, student organization policies, and other related policies to ensure they are aware of both the expectations of them and the rights afforded to them as a member of the university community.

Students who are believed to be in violation of *The Student Code of Conduct* or other university policies will be referred to the Office of Student Conduct for a conference and possible hearing. The student conduct process at YSU adheres to procedural due process and is intended to be part of the larger university educational process. Therefore, outcomes of student conduct hearings wherein students are found responsible for violations of *The Student Code of Conduct* may include educational sanctions, fines, status changes, restriction of privileges, and even expulsion from the University.

In the event that a member of the university community needs to report a potential violation of *The Student Code of Conduct*, they can contact a staff member from Housing & Residence Life, University Courtyards, Student Experience, Student Conduct, or Youngstown State University Police Department. Additionally, the YSUPD website has a Confidential Tip Form that can be used to provide anonymity to the reporting person.

More information and the full text of *The Student Code of Conduct* can be found on the Student Conduct website (<http://cms.ysu.edu/administrative-offices/student-conduct/welcome-student-conduct>).

## Campus Safety

### University Police Department

Youngstown State University maintains a well-trained and well-equipped campus police department. The department is located in Clingan Waddell Hall at the corner of Fifth Avenue and Wood Street.

The staff consists of 23 sworn full time police officers, 69 intermittent sworn police officers, and five civilian support staff. All sworn police officers are trained and certified by the Ohio Peace Officer Training Academy and have full police powers. The department is a community-service, technology-efficient law enforcement agency. The staff is supported by a sophisticated communication system, closed circuit television, well-equipped police vehicles, and a computer-based record-keeping system.

The training of the departmental personnel is ongoing, and crime prevention is a departmental priority. During the academic year, various University organizations sponsor educational programs that feature YSU police officers speaking to students and employees about personal safety, awareness, security, rape/acquaintance rape, sexual-assault and prevention, as well as the prevention of burglary and vandalism.

The Youngstown State University Police Department has mutual aid agreements with the Youngstown City Police Department, the Mahoning County Sheriff's Department, and a majority of other police Departments in Mahoning County and with other state universities in Ohio. The agreements provide for the Youngstown State University Police Department to exercise the same law enforcement authority when engaged in law enforcement functions as their partners in the various mutual aid agreements, in order to provide a safe and secure environment for the Youngstown State University Community. Certain officers from the department are also members of the Mahoning Valley Law Enforcement Task Force as well as the Mahoning County OVI Task Force. These task forces make available additional resources to the YSU Police Department.

The University Police Department is open 24 hours a day. The general business telephone number is (330) 941-3527. The emergency service number is extension 911 dialed through any campus extension. Campus emergency telephones are located throughout campus that will connect you directly to the YSU Police Department in the event of an emergency. 911 calls made from cell phones are answered by the City of Youngstown Communications Center. If a 911 call is made on a cell phone, it is important for the person to tell the call taker they are calling from the YSU Campus. All students are encouraged

to program the YSU Police Department phone number (330) 941-3527 into their cell phones for immediate contact with a YSU Police Dispatcher when a campus phone is not available or convenient.

## Campus Safety Statistics

Youngstown State University has an outstanding record of safety on campus. For a detailed description of campus safety measures and FBI Uniform Crime Report statistics, see the publication *Annual Campus Safety and Fire Report* available from YSU Police, the Vice President for Student Affairs, or from the campus crime-prevention boards located in all campus buildings. 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 the University Police Department website.** (<http://cms.ysu.edu/administrative-offices/police/ysu-police>)

## Emergency Notification System

The University has in place an emergency notification system that instantly reaches cell phones and other mobile devices when an urgent campus situation needs to be communicated. In the event of an emergency, a text message is sent to the mobile number and/or email registered with the system. Students must register at the Penguin Alert System website to receive emergency notifications. Students may also register parents' cell phone numbers at the same website to receive alerts.

## Student Security Service (SSS)

SSS is a free service provided by specially trained YSU student employees who will accompany students, faculty, and staff safely anywhere on campus. During the hours of operation, you can be escorted to the near North Side if an officer is also available to assist with the escort. Student Security Service aides are available Monday through Thursday from 7:00 a.m. to 11:00 p.m., and on Friday from 7:00 a.m. to 8:00 p.m., every day school is in session. The exception is summer semester and during breaks, when escorts are available from 7:00 am to 6:00 p.m. Monday through Friday. Those with disabilities who need assistance are encouraged to make special arrangements to be safely escorted to any location on campus, day or night. Call (330) 941-1515 for more information or to schedule an escort. After hours or on holidays and weekends, call the YSU Police Department at (330) 941-3527 if you need assistance.

## Parking Services

The parking system for students is divided into two categories, transportation fee and penguin promise.

YSU students who arrived on campus prior to summer of 2018 are in the transportation fee category. These students if enrolled in 6+ credit hours will be assessed a \$115 transportation fee which included a parking permit. Students in the transportation fee category who are registered for less than 6 hours may opt in to the fee by purchasing a permit at \$115. All students must log into the current semester in the YSU portal and follow the link to parking services in order to obtain a permit.

YSU students who arrived on campus for summer 2018 or after are in the penguin promise category. Penguin promise students may purchase a parking permit through the YSU portal. Commuter permits, valid 7AM – 11PM daily are \$45. Overnight permits, valid 24 hours a day in overnight parking lots are \$90. All students must log into the current semester in the YSU portal and follow the link to parking services in order to obtain a permit.

Parking permits are required at all times in all lots and spaces on the YSU campus.

Parking areas are designated as follows:

M-Mixed Parking (faculty, staff, and students)

R-Resident Parking

F-Faculty/Staff Parking

S-Student Parking

Parking facilities for students include two parking decks and surface lots. Although some lots are designated for faculty/staff parking during the day, after 5 p.m. daily, most F-lots become mixed (except the F-1 lot on University Plaza).

Street parking is under the jurisdiction of the city of Youngstown. Tickets received for street parking violations must be appealed to the city. For more information, call the Parking Office at (330) 941-3546.

The current parking regulations can be found on the YSU Parking (<http://cms.ysu.edu/administrative-offices/parking-services/parking-services>) web page.

For information on registration of vehicles and applicable fees, see the Tuition, Fees, and Charges section of this catalog.

## 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.

## Disability Parking

All students who wish to utilize YSU handicap parking must bring their valid state handicap registration to Parking Services in order to receive a handicap sticker. Once the sticker is applied to your permit, you may utilize all handicap parking on campus.

If a handicap permit registered to someone other than the YSU parking permit holder is used in conjunction with the YSU parking permit, it is invalid for parking in handicap spaces on campus.

## Campus Facilities

### Campus Development

During its earlier years, the institution had a number of homes. Starting in the old Central YMCA building, it occupied various sites on Wick Avenue until the completion of Jones Hall in 1931. Additional buildings have been constructed and nearby properties converted to University use so that today the campus extends through most of an area five blocks long and four blocks wide, covering almost 150 acres. The University also owns 118.4 acres in Hartford Township.

### Stambaugh Stadium

The long-time home of the YSU Football program, the Arnold D. Stambaugh Stadium complex is one of the top FCS facilities in the country. The Penguins play all their home games on Beede Field, which features a state-of-the-art artificial-turf surface. The Stadium itself has a seating capacity of 20,630 and has a loge complex that houses 26 individual suites. The building is the location of the Jermaine Hopkins Academic Center, the Athletics Strength and Conditioning Complex, Athletic Training Room, Athletic Ticket Office, ROTC, a travel agency, racquetball courts, three full-length basketball courts, and numerous athletics offices. The locker rooms for the softball, soccer, baseball, and football programs are also housed in the building.

Atop the stadium and overlooking the city of Youngstown is the DeBartolo Stadium Club. The club provides meeting and dinner/party seating for more than 200 guests and is available to campus and community organizations



or individuals. For reservation information, please contact the Athletic Department at (330) 941-2385.

## Beeghly Physical Education Center

The longest-standing on-campus athletics facility is the Beeghly Physical Education Center. The facility, which was first used in 1972, is home to the basketball, volleyball, and swimming and diving programs. The Department of Human Performance and Exercise Science, the basketball programs offices, and many YSU athletic teams are located in the building. The Beeghly Center court is named after longtime basketball coach Dom Rosselli. The arena has a seating capacity of more than 6,000 and serves as the home court for the volleyball and basketball teams. The Natatorium features four diving platforms and an impressive swimming pool. Also in the new-look building is the Coaches Court, a room used by the YSU Penguin Club. Additionally, Beeghly has faculty offices; 10 classrooms including laboratories for research and kinesiology; physical education for handicapped; dance studio, a rifle range; and a fitness center.

## YSU Softball Complex

The Youngstown State Softball Complex opened in the spring of 2014 and provides a full-time on-campus home for the Penguins. The facility is located on the west side of campus west of Stambaugh Stadium and just south of Farmers National Bank Field. The lighted complex has access to concessions and restrooms and has seating for more than 200 spectators.

## WATTS

The Watson and Tressel Training Site opened in the fall of 2011. One of the more eye-popping buildings on campus, the WATTS is an indoor athletic facility containing a 300-meter competition track, a full-length football field, batting cages, a putting green, protective netting, and locker room facilities. Built at a cost of nearly \$14 million, this facility allows for year-round training for all athletic programs, as well as a competition site for the track and field teams. Students are permitted in the facility at most times, the WATTS is open for public use in the evening during the winter.

## Farmers National Bank Field

YSU's soccer and track and field programs call the brand new Farmers National Bank Field, located on the west end of campus across from Stambaugh Stadium, home. The full-length soccer field and eight-lane 400-meter NCAA regulated track is one of the best in the region. The facility opened in the fall of 2013 and is utilized by the campus recreation department for intramurals throughout the year.

## YSU Tennis Courts

The area between Stambaugh Stadium and the WATTS is the location of the YSU Tennis Courts. The tennis facility features 10 lighted hard-surfaced courts that are used for practice and competition.

## Andrews Student Recreation and Wellness Center

The Department of Campus Recreation is located in the Andrews Student Recreation and Wellness Center. This state-of-the-art facility contains more than 140 pieces of strength and conditioning equipment. Located near the free-weight and cardio area is the Center's impressive rock wall, at 53 feet Ohio's tallest. Volleyball, basketball, and other activities are situated within the multi-purpose sports forum, which contains four courts. The spacious aerobic studios are home to many group exercise classes and are adjacent to the 1/8-mile indoor track, both on the top floor of the facility.

The Andrews Center also includes a tranquil meditation studio, full-functioning locker rooms, and the Wellness Resource Center. In addition to the Andrews Student Recreation and Wellness Center, the Department supervises programs

in Beeghly Physical Education Center, Stambaugh Stadium, and the outdoor complex.

Participants must have a valid YSU ID card to use the facilities, equipment, services, and programs offered by the Department of Campus Recreation.

The Department is one of the most popular places on campus to be employed. If you are interested in applying for a position, complete the department application found online at the Campus Recreation (<http://cms.ysu.edu/administrative-offices/campus-recreation-and-wellness/campus-recreation>) website. Submit a cover letter and resumé to the Department of Campus Recreation administration office, located in the Andrews Student Recreation and Wellness Center.

For additional information about the Department of Campus Recreation, please contact (330) 941-3488 or visit Campus Recreation (<http://cms.ysu.edu/administrative-offices/campus-recreation-and-wellness/campus-recreation>).

## Off-Campus Athletics Facilities

While Youngstown State has some impressive on-campus facilities, programs still utilize areas off campus for events and competition. The baseball program plays all home games at Eastwood Field in Niles. Eastwood Field, a 6,000-plus seat stadium, is home to the Cleveland Indians' short-season Class A affiliate. The golf programs call Mill Creek Park's course its official home, but practice at various courses throughout the area. During the winter portion of its campaign, the tennis programs utilize the Boardman Tennis Center. The BTC features 10 indoor courts for all-year use.

## Beeghly Hall

The four-story, 96,600 square foot Beeghly Hall opened in the fall of 1998 to serve as the College of Education building.

On the main floor are the main north/south entrance and access, dean's suite, Wilcox Curriculum Resource Center, Child Study Center, and the 400-seat multi-purpose and multi-media Mckay Auditorium.

The Beeghly College of Education building includes:

- interactive distance-learning classroom
- classroom of the future
- Center for Teaching and Learning Technology
- Macintosh- and Windows-based computer labs
- Curriculum Resource Center
- counseling clinic
- child-study center
- Testing Office

## Bliss Hall

Housing the Cliffe College of Creative Arts and Communication, Bliss Hall, completed in 1977, was named in memory of William E. Bliss, a prominent area industrialist. Its facilities include:

- the 390-fixed seat Ford Theatre, named for the Ford family
- the 248-seat Bliss Recital Hall
- an experimental theatre with flexible seating for up to 250
- 80 music practice rooms equipped with Steinway studio or grand pianos
- a Schlicker performance organ and two Flentrop practice organs
- 30 faculty office-studios which can be used for music instruction
- a band/orchestra room with a library
- a photography studio with enlargers
- a metals studio
- fully equipped drawing, printmaking, sculpture, and painting studios
- a MIDI/graphics computer lab



- a video editing suite
- a Mac-based graphic design laboratory with dye-sublimation printer
- ceramics studios with gas, electric, raku, and salt kilns
- a complete shop with heavy equipment for working in three-dimensional design
- art faculty office-studios
- a student lounge/art gallery
- conference and seminar rooms

Bliss Hall has recently seen major renovations to administrative offices. A new jazz rehearsal room, video production studios, and upgrades to art and sculpture areas were part of same renovation project. Opened in Fall 2005, a painting and sculpture addition included a foundry and metal fabrication, wood shop, sculpture and painting labs, offices, a 3D visualization lab, and an exterior work court.

## Cushwa Hall

Opened in 1976, this structure houses the Bitonte College of Health and Human Services, as well as Media and Academic Computing, the Peace Officer Training Academy, and Janitorial Services and Recycling. One of the largest buildings on campus, it contains 27 classrooms, 44 laboratories, 173 offices, and two lecture halls. In summer of 2013, the building underwent a \$2.2 million renovation. Various medical artifacts from the Rose Melnick Medical Museum are currently displayed throughout Cushwa Hall as well.

## DeBartolo Hall

First occupied in 1978, DeBartolo Hall houses the departments of Economics, Philosophy and Religious Studies, Political and Social Science, Psychology, Sociology and Anthropology, and the Africana studies and women's studies programs. Also housed in DeBartolo Hall is the Center for Peace and Conflict Studies. In this six-story structure are more than 165 offices for faculty and staff, five student lounges and study areas, 15 classrooms, 15 laboratories, a computer terminal room, a 200-seat lecture hall, and special varied laboratories for the Department of Psychology. Building renovations took place summer of 2013 and 2014.

## Fedor Hall

Fedor Hall is located on the west side of Elm Street. It was constructed in 1949 and purchased from the Youngstown Board of Education in September 1965. A \$1,100,000 renovation project was completed in 1992. It houses the Wee Care Day Care Center, the Rich Autism Center, and Youngstown Early College.

## Historic Buildings

Listed in the National Register of Historic Places in recognition of their representing important eras in Youngstown's development, these two buildings are in the Wick Avenue Historical District. Renovation efforts were dedicated to maintaining the visual, architectural and physical character of these structures while recognizing, identifying, and preserving their heritage.

### Fok Hall

The Honors College is housed in the oldest building on campus, built in 1893 and originally the home of the Myron Israel Arms Family. It is located on the corner of Wick Avenue and University Plaza.

### Coffelt Hall

This two-story brick building, located on the north side of University Plaza, was constructed in 1933 and renovated in 2010 to house the College of Graduate Studies.

## Jones Hall

One of the oldest buildings on the present campus is Howard W. Jones Hall, a limestone structure of conventional Tudor style on the northwest corner of Wick and Lincoln avenues. Built in 1931 and long the institution's "main

building," it was renamed in 1967 to honor the man whose energy and acumen, during his 36 years as president, brought an embryonic college to membership in the state university system.

The structure was enlarged in 1949 by the addition of the C.J. Strouss Memorial Auditorium, named for the then president of the Strouss-Hirshberg Company, a friend and trustee of the University. In 1978 the interior was completely remodeled to accommodate administrative offices. Jones Hall currently houses the Offices of Student Success, Payroll, Accounting, Enrollment Management, Records, the Center for International Studies and Programs, Associate Degree and Technical Preparation Programs, and Office of Diversity and Multicultural Affairs

## Kilcawley Center

Kilcawley Center is the community center of the University. The Center's facilities and services include numerous dining rooms with a variety of diversified food service programs, lounges, 19 conference and multi-purpose rooms, ATM machine, graphic services, candy counter, copy services, stage and entertainment areas, and a billiards recreation area, as well as a FAX service, campus locker rentals, the University's lost and found, and the Center's reservations and conference services office. Kilcawley Center also includes a computer/word processing access center, campus information center, catering offices, Career and Academic Advising, Disability Services, Student Conduct, Student Counseling Services, Student Media, Student Outreach and Support, Vice President for Student Affairs office, and the Center's staff offices. Student Activities, Student Government, and student organizations/mailboxes are located in west end of Kilcawley, as is the Center for Student Progress.

## Lincoln Building

The Lincoln Building houses the Department of Mathematics and Statistics, the Math Assistance Center, and the offices of Distance Education and Metro Credit, as well as 14 classrooms and four laboratories.

## Maag Library

The University's six-story William F. Maag, Jr., Library, completed in 1976, provides an attractive and comfortable environment for study and research. A member of the Online Computer Library Center (OCLC), Maag Library provides reference and inter-library loan services, CD-ROM as well as online database searching, access to government documents, and other services necessary to the needs of the University community. The University Archives are housed on the fifth floor, and the Tech Desk is located on the fourth floor. The lower level of Maag houses the Writing Center, the Reading and Study Skills Center, and the English Language Institute.

## Melnick Hall

Located on Wick Avenue, the YSU Foundation and WYSU-FM are housed in Melnick. In the future, a space will be created for the Rose Melnick Medical Museum.

## Meshel Hall

Meshel Hall, dedicated January 1986, houses expanded facilities for academic and administrative computer use that broaden Youngstown State University's educational programs. The state-of-the-art center is for instruction, research and application in advanced computer technology that serves the entire University community.

The four-story steel, concrete, stone and glass structure contains 90,100 square feet of space and is located to the west of the Wick Avenue Parking Deck with its main access and entry by the pedestrian walkway over Wick Avenue. The building contains five classrooms, 10 specialized computerized laboratories, and 23 faculty offices. The Office of University Bursar, the Office of Financial Aid and Scholarships, and the Enrollment Center are located on the second floor.

The Department of Computer and Information Systems is located on the third floor. The fourth floor houses the University's main computer facilities and Computer Center staff.

## John J. McDonough Museum of Art

The John J. McDonough Museum of Art, located on Wick Avenue between Bliss Hall and Meshel Hall, opened for the fall quarter of 1991. The 14,000 sq. ft. multi-level building exhibits faculty and student art work, which in the past has been displayed in the Bliss Art Gallery and the Kilcawley Center Art Gallery. It also exhibits works by artists from other universities as well as local and regional artists, and serves the academic program of the Art Department with shows and competitive exhibits. The museum has the following spaces and functions: installation gallery, traditional galleries, art lecture hall, work/preparation area, storage, public lobby and restrooms, offices, loading dock and receiving area, and the necessary mechanical and electrical equipment spaces.

## Moser Hall

Moser Hall, a five-level structure completed in 1967, houses the College of Science, Technology, Engineering, and Mathematics. In addition to 49 laboratories, 11 classrooms, two research and development rooms, seven conference rooms, and 76 offices, it contains the 200-seat state-of-the-art Schwebel Auditorium. A \$6,873,000 renovation project was completed in fall 1996. Moser Hall also houses the Clarence R. Smith Mineral Museum.

## Phelps Building

The Phelps Building, located on the corner of Lincoln Avenue and Phelps Street on campus, houses the Department of Geography and the Public Service Institute, including the Center for Urban and Regional Studies and the Center for Human Resources Development, and Institutional Research and Analytics.

## Service Buildings

The buildings at various locations on campus that house specific services include:

### Salata Complex

Salata Complex, located on Rayen and Wood Streets, houses University planning and construction, maintenance, administration staff, Grounds Department staff and equipment, Central Receiving, Key Control, Motor Pool, various repair shops, Printing Services, and Mail Room.

### Central Utility Plant

The Central Utility Plant is located south of the new WATTS Center on the north side of campus. The plant has the capability of producing steam and chilled water for University needs and is distributed through a system of underground tunnels and direct-burial utility lines.

## Smith Hall

Parking Services has been moved to this new location at 275 Fifth Avenue (southeast corner of Rayen and Fifth Avenues).

## Sweeney Hall

Sweeney Hall—formerly Dana Hall—a classic one-story building located at the corner of Bryson Street and University Plaza, was constructed in 1908. The building houses the Sweeney Welcome Center and the Office of Admissions.

## Tod Hall

The University's main administrative offices are in Tod Hall, a former library building built in 1952 and thoroughly renovated in 1978. These offices include:

- Office of the President
- Office of the Provost

- Office of the Vice President for Finance and Administration
- Office of the Vice President for Student Affairs
- University Development, Grants, and Contracts
- Office of Assessment
- Office of Marketing Communications
- ASECU Credit Union
- Office of Equal Opportunity and Policy Compliance
- YSU Board of Trustees' meeting room
- Human Resources
- The Office of Alumni and Events Management

## Veterans Resource Center

The brand new Veterans Resource Center, located at 633 Wick Avenue, houses the Office of Veterans Affairs (OVA) which serves as a central location to discuss issues, questions, or concerns current and prospective military and veteran students may have regarding their enrollment.

The Veterans Resource Center (VRC) is a 6,000 square foot, fully handicap accessible facility that is the first of its kind at any university in Ohio. The VRC features lounge space, a computer lab, meeting rooms, a community/class room, kitchenette, ample office space for outside veteran-related organizations, and much more. The VRC is open to all student veterans, currently serving military members, and military dependents who are using veteran's education benefits.

Students and all interested parties can contact the OVA by visiting our OVA (<http://cms.yzu.edu/administrative-offices/veterans-affairs/office-veteran-affairs>) website, emailing us at [veterans@yzu.edu](mailto:veterans@yzu.edu), or calling the office at (330) 941-2503/2523. Individual person-to-person meetings are available and encouraged.

## Ward Beecher Hall

This building houses the departments of Biology, Chemistry, and Physics and Astronomy. The five-story original unit was constructed in 1958, a major addition was built in 1967, and a small addition comprising chemical storerooms was completed in 1997. It was built with funds contributed by Mahoning Valley Industries and area industrialist Ward Beecher. Presently the building contains 31 laboratories, including a planetarium and a greenhouse, nine classrooms, 66 academic offices, 53 faculty-research rooms, and a conference-seminar room.

## Williamson Hall

Opened in fall 2010, Williamson Hall houses the Williamson College of Business Administration offices, including:

- Office of the Dean
- Center for Student Services and the Professional Practice Program
- MBA program
- Lariccia School of Accounting and Finance
- Department of Management
- Department of Marketing

In addition, the building houses 14 classrooms, a Financial Services Lab, a Professional Sales and Business Communication Lab, interview rooms, a 200-seat auditorium, and a conference center. WCBA student organizations share office space in the building, and students have access to eight student team rooms, three networked computer labs, a quiet study lounge, and collaborative areas. Williamson Hall is also home to:

- Center for Nonprofit Leadership
- Williamson Center for International Business
- Nathan and Frances Monus Entrepreneurship Center

- Ohio Small Business Development Center at YSU
- Executive-on-Campus office

The Gallery of Industry, Business, and Entrepreneurship, a spacious sky-lit atrium, and café with outdoor seating are also part of the 110,000 square feet facility.

LEED-certified by the US Green Building Council, Williamson Hall is the first "green" building on the Youngstown State University campus.

## University/Community Outreach

### Regional Economic Development Initiative (REDI)

The Regional Economic Development Initiative (REDI) at Youngstown State University (YSU) was established in 1967 as the Center for Urban and Regional Studies (CURS) to act as a research and public service arm of YSU. The mission of CURS has been to integrate professional staff, faculty, students, and other University resources to focus on issues and problems of urban and regional development through an ongoing program of basic and applied research and technical assistance and by providing training for local government, community, and economic development organizations and businesses.

In 2015, CURS transitioned to REDI and assumed an added role as "Navigator" in providing research-based, implementation-focused economic development support services for the Mahoning Valley. REDI's focus reflects a "plan-implement" process which parallels the familiar "design-build" process often seen in the architecture and construction industries. This focus will enable REDI to help identify and quantify challenges and opportunities, support economic development implementation, and provide a broad array of support services throughout the Mahoning Valley.

REDI offers federal, state, and private grant-writing, and it provides valuable GIS mapping and data services to a number of local and regional government, nonprofit organizations, and social service agencies throughout the region.

Recent initiatives include studies, strategy development, or project implementation related to Community Crime Prevention, Community Health Initiatives, Green Infrastructure, Urban Transportation, Neighborhood Parks Restoration, Road Condition Assessment, Wayfinding Signage, and Comprehensive Community Planning.

### Center for Human Services Development

The Center for Human Services Development is an externally-funded, community outreach department. With the mission to work with organizations and faculty to build capacity through the support of services and research, the Center's main objective is to increase the ability of organizations to serve the people of the Mahoning Valley. Led by experienced professionals, the Center works to provide a variety of services to community agencies and departments across campus.

#### The scope of the Center is:

- Establishing and maintaining networks or linkages among service providers and the broader community.
- Offering technical assistance for social service program evaluation.
- Providing training for agency directors, boards, and staff members.
- Conducting community-wide needs assessments and sharing information.
- Helping organizations to develop strategic plans.
- Identifying and obtaining grants for community organizations that are working collaboratively to address community needs.

Professional Services:

- Technical assistance
- Evaluation
- Grant writing
- Data analysis
- Program and grant management
- Professional development

The Center is housed in the Beeghly College of Education and can be contacted by calling (330) 941-3469.

### Continuing Education

Continuing education non-credit programs offer area residents a wide variety of adult study or lifelong-learning courses and seminars to meet the needs of a changing society for updating and upgrading professional skills, for mid-career adjustments, and for lifestyle changes.

Area residents participate annually in more than 200 non-credit programs, many of which are in the academic disciplines and professional areas, varying from half-day seminars to multi-week courses conducted in local business and government settings and other off-campus locations.

### Center for Creative Retirement

#### The College for the Over Sixty

- 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 credit classes on a space-available basis. Residents who meet eligibility requirements based on income level may earn credit toward a degree through the Over Sixty program.

#### The YSU-ILR (Institute for Learning in Retirement)

- an affiliate of the Elderhostel Institute Network, providing seniors with the opportunity to develop and conduct educational and social opportunities for the members of YSU-ILR.

### Community Counseling Clinic

The Community Counseling Clinic (CCC) is a training clinic for students who are earning their master's degree in counseling. The clinic's counselors and trainees provide individual, family, couples, and group counseling services to YSU students and their families, as well as all children, adolescents, and adults living in Youngstown and its surrounding communities.

The CCC offers a relaxed and confidential environment to discuss personal, relationship, academic, or work-related problems. Examples of matters which may cause one to seek counseling include: academic success-related concerns, relationship problems, family conflicts, adjustment-related problems, depression, anxiety, career indecision, and loss and grief issues. Talking with a counselor can be an important first step in making desired life changes.

Day and evening appointments are available. Appointments can be made in person or by calling (330) 941-3056. The CCC is located in Room 3101 in the Beeghly College of Education, which is at the corner of Fifth and Rayen avenues. Free parking is available. Additional information is available at the Community Counseling Clinic (<http://www.yzu.edu/community-counseling-clinic>) website.

### The Ohio Small Business Development Center

#### The Ohio Small Business Development Center (SBDC) and export assistance Network at youngstown state university

The Ohio Small Business Development Center (SBDC) and Export Assistance Network at YSU is part of the most comprehensive and effective business

assistance network in the nation. Its purpose is to help existing businesses develop, grow, and retain a competitive advantage in the ever-changing global economy while helping entrepreneurs realize their goals of business ownership.

In Ohio, the SBDC program is a partnership of the Ohio Development Services Agency and the U.S. Small Business Administration. Locally, the SBDC is hosted by Youngstown State University and the Williamson College of Business Administration. The Center provides professional, in-depth business, exporting, and international trade consulting and training to existing and new business ventures to help foster a strong and successful business community in the counties they serve. There is no fee for the consulting services, and all company and project information is held in strict confidence.

The Ohio Small Business Development Center and Export Assistance Network at YSU is located in the Williamson College of Business Administration – Room 1155, and can be reached at: (330) 941-2140.

## **Telecommunication Services**

### **WYSU-FM, 88.5 MHz**

Youngstown State University owns and operates WYSU-FM, a 50,000-watt radio station that serves the Mahoning and Shenango Valley region with fine arts and news and information programming from its studios in Cushwa Hall. The station broadcasts a mix of news and classical music programs on its main analog channel, on its HD1 (digital) channel, and as an Internet stream; it also broadcasts all-classical music on its HD2 channel and second Internet stream. The station broadcasts at 88.5 MHz in Youngstown, at 88.1 MHz in Ashtabula, and 97.5 MHz in New Wilmington, Pennsylvania.

WYSU-FM is non-commercial, listener-supported public radio, committed to being the community's leading source for trusted, in-depth news, engaging conversation, and music that stimulates the mind and spirit.

As one of Youngstown State University's most visible daily representatives to the community, WYSU also strives to be a valuable ambassador to that community, providing a forum to promote the artistic and intellectual activities of the university. The core of the radio operation is a full-time professional staff. Youngstown State University students whose qualifications meet professional broadcasting standards are also employed to support various aspects of the station's operations.

### **FM-SCA Programs**

The University transmits special educational programs for the sight-disabled on a multiplex basis using a sub-carrier frequency of 67 kilohertz.

## **Western reserve public media, Northeastern Educational Television of Ohio**

The University is a member of NETO (Northeastern Educational Television of Ohio), a public television consortium of the state universities at Akron, Kent, and Youngstown, which operates UHF Channels 45 and 49.

Common transmitters at Salem and Akron broadcast programs acquired from the Public Broadcasting Service and the Ohio Educational Television Network as well as local programs produced at Kent, Akron, and by contract at Youngstown.

## 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. As noted in its mission statement, "The College of Graduate Studies supports the continued development of faculty scholarship and 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 cross-section 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.

# THE COLLEGE OF GRADUATE STUDIES

## Advance your degree, advance your career.

YSU's faculty is highly qualified and successful in research, scholarly and creative works. Our up-to-date programs offer the latest developments in research and technology. Most importantly we are an urban research university that highly values teaching. This means that the focus is on you and your professional development. Graduate programs are designed to provide student growth in both theory and practice. Field experiences are available and encouraged. In addition there are always opportunities for research with the faculty.

Our graduate faculty members are accessible both in and out of the classroom. This provides you with the professional and personal interaction needed to develop your potential in addition to increasing your career mobility. Whether you have a specific career path in mind, or are seeking broader professional growth, you'll find solid educational value at Youngstown State University. We hope you will decide to pursue your graduate education here at YSU. You'll find high quality graduate education at Youngstown State University.

## Mission Statement

As a state-assisted metropolitan university, the instructional mission of Youngstown State University is focused on the educational, scholarship, research, and service requirements of residents and students of northeastern Ohio and western Pennsylvania, as well as a broader region, including all of Ohio and its surrounding states. This mission is designed to meet a variety of needs, including those in the industrial, professional, business, educational, social, and cultural areas. In support of this mission, the fundamental responsibility of the College of Graduate Studies is to make quality graduate education available to all qualified persons desiring it. Graduate study at Youngstown State University provides an integrated program of advanced study leading to discipline mastery and an understanding of related subjects. A thorough training in research skills and/or professional applications associated with the base of knowledge for each discipline is implicit in all graduate programs. Because of the very nature of graduate work itself, a more than average investment and initiative in learning, inquiry, research, and scholarship will be required on the part of candidates for an advanced degree. Thus, the College of Graduate Studies seeks to develop and maintain programs of high stature that achieve appropriate professional accreditation and attract quality students to the University.

Graduate programs that yield students who have mastered their discipline require a faculty of teacher-scholars who are active in their respective fields of study, whether they are professionally oriented or involved in more traditional scholarship, research, and creative activities. Individuals who meet these requirements constitute the graduate faculty.

The College of Graduate Studies supports the continued development of faculty scholarship and 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.

## 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, and 2008. 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
- Assistantship Allocation
- Curriculum
- Exceptions
- Policy
- Graduate Student Recruitment and Retention

## 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 six graduate student representatives to the six College Graduate Studies Committees also constitute the Graduate Dean's 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,
  - Curriculum,
  - Exceptions,
  - Policy, and
  - Recruitment and Retention.

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) (<http://www.ysu.edu/gradcollege>). Students are required to pay the admission fee by credit card or electronic check as part of the process. Applicants must send one transcript from each college or university attended, except YSU, to the College of Graduate Studies. Official transcripts must be sent directly from the institution to the College of Graduate Studies. Personal or unofficial transcripts issued to the student or those delivered or sent by the applicant instead of the institution will not be accepted.

Applications for admission cannot be reviewed until official transcripts of all previous college or university work are received. The applicant must see that the transcripts reach the College of Graduate Studies at the earliest possible date.

The applicant 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 processing of the application. International applicants should also see the International Student Admission section for additional requirements. As soon as possible after receipt of all application materials, the student will be notified of the action taken on the application. Registration information will be provided once the student has been admitted to the College of Graduate Studies.

Once accepted for admission to the College of Graduate Studies, an applicant may defer admission one time within one year at no cost. The one year will be from the term and year initially selected. Additional deferral of admission or deferral beyond one year will require the applicant 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 a sealed certified/attested official transcript to the College of Graduate Studies
- If a study abroad student, who earns 24 hours or less at a non-U.S. institution, provides an official transcript from a regionally accredited U.S. school of record that documents the study abroad courses (including credit hours and grades), no additional transcript is required.

## Test Information

In certain master's programs, test results must be submitted to the College of Graduate Studies as part of the admission procedure. The Graduate Record Examination is available at Sylvan Learning Center locations. 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)
- 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 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

## Types of Admission

### Regular

Regular admission will be granted to students who satisfy the admission requirements for the master's 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 his or her 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 non-degree 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 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 non-degree 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](http://www.ysu.edu/sites/default/files/RequestforTransient_Status_1016.pdf)). 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.

## International Student Admission

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.

## Academic Credentials and Test Scores

Please arrange to have all colleges and universities attended send the following academic credentials:

- Official (or certified copies) of transcripts or mark sheets
- An official English translation of the transcript if the transcript is not in English
- Certified copy of your graduation certificate/degree stating the degree earned/proof of degree

Official academic credentials are required for admission to the College of Graduate Studies and should be sent whenever possible. However, for application review purposes, scanned copies of academic credentials from institutions outside of the United States 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.** International applicants can be conditionally admitted to the College of Graduate Studies, based on scanned documents. Sealed originals will be required for regular

admission. **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.**

**International students who have attended a U.S. college or university must submit official documents for admission purposes. Copies will not be accepted.**

All test scores (GRE, GMAT, MAT, TOEFL, IELTS, etc.) required for admission to YSU and the program of interest must be sent directly to YSU from the testing agency. The YSU institution code is 1975. **Official test scores are required for admission.**

Official academic credentials and test scores should be sent to:

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

- Provisional Certificates will be accepted **in lieu of Final Certificates** for international applicants in South Asian, and African markets

## English Language Proficiency

- **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).
- 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 English-medium 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.
- International applicants may be conditionally admitted to the graduate college based on (7) seven semesters of undergraduate study. The conditional admission is contingent on students finishing the degree, and providing a provisional certificate or proof of degree.

# GRADUATE PROGRAMS

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

## Doctoral Degree Programs

- Doctor of Education in Educational Leadership
- Doctor of Philosophy in Materials Science and Engineering
- Doctor of Physical Therapy

## Educational Specialist Degree

- Educational Specialist in School Psychology

## Master Degree Programs

- Master of Accountancy
- Master of Arts in American Studies
- Master of Arts in Art Education
- Master of Arts in Economics
- Master of Arts in English
- Master of Arts in Financial Economics
- 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 Fine Arts in Interdisciplinary Visual Art
- Master of Health and Human Services
- Master of Music in Jazz Studies
- Master of Music in Music Education
- Master of Music in Music History and Literature
- Master of Music in Music Theory and Composition
- Master of Music in Performance
- Master of Public Health
- Master of Respiratory Care
- Master of Science in Applied Behavior Analysis (Beginning Fall 2019)
- Master of Science in Biological Sciences
- Master of Science in Chemistry
- Master of Science in Criminal Justice
- Master of Science in Environmental Science
- 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 – Teacher Education
- Master of Science in Chemical Engineering
- Master of Science in Civil and Environmental Engineering
- Master of Science in Electrical Engineering
- 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 – Nurse Anesthetist

- Master of Science in Nursing – Nurse Education
- Master of Social Work

## Online Graduate Programs

- Master of Respiratory Care
- Master of Arts in Financial Economics
- Master of Business Administration
- Master of Health and Human Services
- Master of Respiratory Care
- Master of Science in Criminal Justice, Criminal Justice Management and Program Planning
- Master of Science in Engineering, Management option

For additional information please: visit the Office of Distance Education website at <http://cms.ysu.edu/administrative-offices/distance-education/distance-education>, call the office at (330) 941-1516, or send an e-mail to [distanceed@ysu.edu](mailto:distanceed@ysu.edu).

## Certificates

- Certificate in Applied History
- Certificate in Biological Sciences
- Certificate in Instructional Communication
- Certificate in Economics
- Certificate in English
- Certificate in Enterprise Resource Planning
- Certificate in Environmental Studies
- Certificate in Health Care Management
- Certificate in Literature for Children and Young Adults
- Certificate in Mathematics
- Certificate in Nurse Education
- Certificate in Professional and Technical Writing
- Certificate in Teaching English to Speakers of Other Languages (TESOL)
- Certificate in the Teaching of Literature
- Certificate in Teaching of Writing
- Post-masters Family Nurse Practitioner Certificate Program
- Post-masters Adult-Gerontology Acute Care Nurse Practitioner Certificate

## Doctor of Education in Educational Leadership

### Program Coordinator

Dr. Charles Vergon  
4103 Beeghly College of Education  
(330) 941-1574  
[cbvergon@ysu.edu](mailto:cbvergon@ysu.edu)

### Program Description

The Doctor of Education program in educational leadership provides terminal professional preparation for administrators in public and nonpublic schools and health and human service organizations, especially, but not exclusively, those working in the northeastern Ohio and western Pennsylvania areas served by the University. Professionals currently occupying leadership positions in other settings may also be considered for admission when space in the cohort permits. The program is also open to health-professionals for whom no terminal degree is available in their field but who desire a rigorous program of research and leadership studies. The program is designed to build the capacity of individuals to provide effective educational leadership in such organizational settings, with particular attention to enhancing efficiency, equity, and excellence.



The program focuses on the preparation of professionally committed practitioners who reflect the current state of knowledge and best practice in educational leadership. Central to the preparation of such professionals are the refinement and transmission of competencies in the areas of scholarship, instruction, leadership, management, external relations, and personal development. The program is cohort-based and delivered in mixed-mode format with monthly campus meetings and other instruction accomplished through web-based modules.

Admission to the doctoral program is made on a cohort basis. Students are expected to enroll for two doctoral core courses per term for Fall, Spring, and Summer terms. Students who fail to progress with their cohorts will have to await the normal core course rotation to enroll in missed courses. Students who are inactive for more than three terms will have to be readmitted to the program upon the Doctoral Admission Committee's recommendation.

The doctor of education program is administered by the Department of Counseling, School Psychology and Educational Leadership in the Beeghly College of Education.

## Accreditation

The Ed.D. program in educational leadership is nationally recognized by the Educational Leadership Constituent Council. Education programs at Youngstown State University are accredited by the National Council for the Accreditation of Teacher Education.

## Application Procedure

Program information may be obtained from the Department of Counseling, School Psychology and Educational Leadership. 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). No Ed.D. student may enroll for more than six semester hours unless his or her advisor approves such 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 by cohort, based upon a competitive evaluation of applications 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

- Possession or qualification for licensure, if it exists for their profession, in the state in which they wish to practice
- Completion of three or more years of professional experience in their field
- Completion of two or more years of administrative experience or demonstration of exceptional leadership skills
- Submission of a detailed resume

### High Academic Achievement

- Completion of an accredited master's degree program in educational administration or in health and human services with a minimum grade point average in graduate study of 3.5 or master's degree in another field with extensive experience in a senior leadership capacity in such an organization.
- Combined score of 900 or more (or 290 or more on revised scale) on the general tests of the Graduate Record Examination. This test must have been completed within the past five years. Applicants must plan to register for this examination in advance. Provisional admission may be granted to otherwise outstanding applicants who fail to achieve the cutoff score.

### Professional References

Presentation of three letters of reference attesting to the applicant's good moral character, leadership and management potential, professional plans, success in teaching, professional commitment, interpersonal skills, and special professional capabilities.

### Personal Goals and Leadership Vision

- Submission of a statement of interest
- Submission of two 500- to 750-word essays: one personal essay and one essay on their leadership vision

### Faculty Interview

- At the request of the doctoral faculty, a personal interview may be required when the initial screening based upon the standards previously listed warrants further assessment of the applicant's likely success in the program.
- Approval of the applicant by the doctoral faculty

## Graduate Faculty

**Jane Beese**, Ed.D., Associate 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., Associate Professor

Assessment; research design and methodology; statistics

**Charles B. Vergon**, J.D., Professor

Education law; policy development; educational change

## Degree Requirements

The credit hours required for the Ed.D. in educational leadership consists of a minimum of 61 semester hours beyond the master's degree. These include:

- 30 semester hours of doctoral core courses,
- 18 hours of electives,
- a 3-hour leadership internship or clinical practice, and
- 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.

COURSE	TITLE	S.H.
<b>Educational Leadership Core</b>		
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 8140	Seminar in Administrative Theory	3
EDAD 8155	Seminar in Current Educational Issues	3
FOUN 8102	Perspectives on Leadership Among Diverse Populations	3
<b>Educational Research Core</b>		
EDAD 8185	Seminar in Educational Research/Dissertation Proposal	3
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		30

Select 18 s.h. minimum from leadership in public and non-public schools or leadership in health and human service organizations and approved by advisor from candidate's primary professional discipline.

## Leadership in Public and Non-Public Schools

COURSE	TITLE	S.H.
Select 12 s.h. of educational leadership electives.		12
Select 6 s.h. of teaching and learning electives		6
Total Semester Hours		18

## Leadership in Health and Human Service Organizations

COURSE	TITLE	S.H.
Select of 18 s.h. of educational leadership and HHS concentration area courses		18
Total Semester Hours		18

## Clinical Practice in Educational Leadership

COURSE	TITLE	S.H.
Select one of the following:		3
EDAD 7022	Field Experience (Elementary 7022E; Middle 7022M; or Secondary 7022S)	
EDAD 7040	Clinical Practice for the Administrative Specialist	
EDAD 7050	Clinical Experience: Superintendency	
Total Semester Hours		3

## Dissertation study

COURSE	TITLE	S.H.
EDAD 8190	Dissertation Study	
Total Semester Hours		10
TOTAL PROGRAM HOURS		61

## Comprehensive Examinations

Comprehensive examinations consist of a written examination covering six competencies and an oral examination assessing the overall suitability of the individual as a leader in schools or school systems. Satisfactory completion of these examinations qualifies the student as a candidate for the Ed.D. degree and signifies readiness to begin the dissertation study.

## Learning Outcomes

In the Doctoral Program, candidate performance is assessed across the following objectives with focus at the district-wide or systems level.

1. Candidates will be able to facilitate the development, articulation, implementation, and stewardship of a school system-wide vision of learning that is supported by the school community.
2. Candidates will be able to promote a positive school System culture, provide an effective instructional program at the district level, apply best practice to student learning, and design comprehensive professional growth plans for school district staff.
3. Candidates will be able to manage school district organization, operations, and resources in a way that promotes a safe, efficient, and effective learning environment.
4. Candidates will be able to collaborate with families and other community members, respond to diverse community interests and needs, and mobilize community resources.
5. Candidates will be able to act with integrity, fairly, and in an ethical manner in carrying out systems level leadership responsibilities.
6. Candidates will be able to influence the larger political, social, economic, legal, and cultural context.
7. Candidates will be able to synthesize and apply the above outcomes through substantial, sustained, standards-based work in real school system level settings in their choice of post-master's licensure programs- Ohio Superintendent Licensure and Pennsylvania Superintendent Letter of Eligibility Certification.

## Graduate Courses

**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 6931 Leadership in Educational Organizations: Theory to Best Practices 3 s.h.**

Significant theories, research, and professional practices in the leadership of schools and school systems. Detailed analysis of primary sources and application of sources to reflection on issues and problems of administrative practice.

**EDAD 6933 Educational Policy, Politics, and Change 3 s.h.**

Explores who governs America's schools. Provides an introduction to schools as political systems and the values that shape educational politics and policy making. Examines the role of school leaders as agents of change and alternative change models and strategies.

**EDAD 6947 School Building Leadership: Models and Processes 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 6949 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.

**EDAD 6952 School Finance, Resource Planning, and Management 3 s.h.**

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

**EDAD 6954 Educational Marketing and Community Relationships 3 s.h.**

Stresses effective communication that supports the marketing of school purposes and programs. Leadership skills that build community support and recognize the value of message delivery to targeted audiences in the community will be related to the marketing of schools.

**EDAD 6955 Professional Development and Human Resources 3 s.h.**

In-depth examination of policies and practices designed to reconcile the interests of schools and the people who make them up. Topics include professional and staff development, equal employment, position description, recruitment, selection, performance appraisal, removal, compensation, and emerging issues.

**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 6982 Independent Study/Action Research 1-3 s.h.**

Individual investigation of advanced topics under the guidance of selected departmental faculty. May be repeated.

**EDAD 6990 Seminar in Educational Administration 1-3 s.h.**

A seminar designed for the development of particular skills and/or perspectives on a topic related to educational administration.

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

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

**EDAD 6995 Workshop in Educational Administration 1-3 s.h.**

A workshop designed for the development of particular skills and/or perspectives on a topic related to educational administration.

**EDAD 7014 Systematic Use of Information for Continuous School Improvement 3 s.h.**

Information systems concepts: analysis, design, implementation, and evaluation applied to individual, school, and program evaluation and improvement. Experience with information retrieval and synthesis from local and state educational databases. An action research project is a major course requirement.

**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 7022 Field Experience 3 s.h.**

Completed in a school covered by teaching certificate or license. Second administrative clinical experience designed to highlight tasks.

**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.

**Prereq.:** Candidates must have completed all or be currently enrolled in remaining courses that compose the requirement of respective specialist license.

**EDAD 7050 Clinical Experience: Superintendency 3 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 three of the following four courses: EDAD 7024, EDAD 7025, EDAD 7026, EDAD 7035, and two years experience in a building-level administrative capacity or equivalent.

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

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. 3 s.h. Cross listed with FOUN 8111.

**Prereq.:** EDAD/FOUN 8104.

**EDAD 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 with** FOUN 8113.

**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 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 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 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 8185 Seminar in Educational Research/Dissertation Proposal 3 s.h.**

The purpose of this course is to gain knowledge and skills in developing a research question and an appropriate methodology so that chapters I and II of a doctoral dissertation can be completed.

**Prereq.:** FOUN 8104, FOUN 8112, and FOUN 8111.

**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 8931 Leadership in Educational Organizations 3 s.h.**

Significant theories, research, and professional practices in the leadership of schools and school systems. Detailed analysis of primary sources and application of sources to reflection on issues and problems of administrative practice. D. program in Educational Leadership. Ed.D. students who have not taken EDAD 6931 are required to complete EDAD 8931 and include a supplemental, substantive course assignment that relates to their intended area of specialization.

**Prereq.:** Admission to the Ed.

**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 5875 Seminar in Foundations of Education 1-3 s.h.**

Selected topics for a focused study on problems, issues, or concerns to be addressed by a sociological, historical, philosophical, assessment, or research perspective.

**Prereq.:** Permission of chairperson.

**FOUN 5880 Special Topics in Foundations of Education 1-3 s.h.**

An advanced study of sociological, historical, and/or philosophically based research which provides analysis of a particular educational issue with special emphasis on implications for diverse populations and/or diverse school settings.

**Prereq.:** Permission of chairperson.

**FOUN 6901 Philosophical Analysis of Education 3 s.h.**

A philosophical examination and critical reflection on educational theories, including a familiarization with historical contexts and socio/cultural conditions that fostered and related resistance to these theories.

**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 6905 Educational Challenges in Historical Perspective 3 s.h.**

Critical analysis of first-person and other historical accounts of teachers, students, communities, and school reforms as they inform curricular, professional, and social challenges that face educators in their communities today.

**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/spiritualities. 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 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. 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 with** EDAD 8113.

**FOUN 8115 Schools Society Ideologies 3 s.h.**

## 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 through the online application system (<https://ysu.ellucianrecruiter.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 (<http://catalog.ysu.edu/graduate/graduate-programs/doctor-philosophy-materials-science-engineering/%20https://ysu.elluciancrmrecruit.com/admissions/pages/welcome.aspx>)).
- 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

**Martin A. Abraham**, Ph.D., Professor  
Green engineering; sustainability

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

**Brett P. Conner**, Ph.D., Associate Professor  
Materials and process development for additive manufacturing (also known as 3D printing); functionally graded materials (FGMs); high-strain rate behavior of AM materials; 3D printing of metal casting tooling; business models for additive manufacturing

**Pedro Cortes**, Ph.D., Associate Professor  
Structure-property relationships of polymers; composites and hybrid materials; smart materials and structures; development of chem-bio sensing platforms based on carbon nanotubes

**Michael J. Crescimanno**, Ph.D., Professor  
Noise spectroscopy in multiphoton quantum optics; optical materials

**Allen D. Hunter**, Ph.D., Professor  
Materials chemistry; crystallography; instrumental Methods; chemistry education

**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



**Frank Xiyang Li, Ph.D., Professor**

Electron spin resonance imaging; EMC, RF, and software engineering; networks; applied magnetic fields

**Clovis Linkous, Ph.D., Professor**

Ceramic electrolytes, polymer membrane electrolytes, solid state hydrogen storage, photovoltaic materials, photocatalytic decomposition of hydrogen sulfide; algae inhibition

**Sherri R. Lovelace-Cameron, Ph.D., Professor**

Synthesis and electrochemistry of novel organometallic polymers; synthesis of metal organic frameworks

**Hazel Marie, Ph.D., Professor, Chair**

FEA/CFD modeling applied to solid-fluid interaction of thin film lubrication sealing; mechanical material modeling of soft biological tissue

**Holly J. Martin, Ph.D., Assistant Professor**

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

**Tom Nelson Oder, Ph.D., Professor**

Micro/nano fabrication and characterization of electronic and opto-electronic devices of wide band gap semiconductors: SiC, group III-nitrides, ZnO

**Donald Priour, Ph.D., Assistant 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

**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

**Virgil C. Solomon, Ph.D., Associate 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.
<b>Materials Science and Engineering Course Core</b>		
MATL 7010	Analytical Methods for Materials Science 1	2

MATL 7020	Analytical Methods for Materials Science 2	2
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
<b>Materials Science and Engineering Research Core</b>		
MATL 6982	Graduate Research	21
MATL 6990	Seminar in Materials Science and Engineering	3
MATL 8050	Materials Internship <sup>or electives</sup>	6
MATL 8060	Dissertation	32
<b>Electives</b>		
Select 12 s.h. of Electives.		12
Total Semester Hours		90

## Special Notes

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

## 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 2 s.h.**

A laboratory course where the student will receive hands-on training with instruments commonly used in materials research. Techniques covered include optical methods, thermogravimetry, differential scanning calorimetry, X-ray diffraction, X-ray fluorescence, magnetic permeability, Hall effect, and atomic force microscopy. (1 h. lecture / 3 h. lab).

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

A laboratory course where the student will receive hands-on training with instruments commonly used in materials research. Instruments covered include stress/strain apparatus, scanning electronic microscope, electron microprobe, transmission electron microscope, focused ion beam microscope, X-ray photoelectron spectrometer, Auger spectrometer, impedance analyzer, and potentiostat. (1 h. lecture / 3 h. 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  
B311 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 well-credentialed 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 2 or 3 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

The Physical Therapy Department at Youngstown State University will provide the entry-level doctorate in physical therapy degree (DPT), selected doctoral programs and opportunities for professional development. We will be recognized locally and statewide as a high quality program that prepares students to be autonomous professionals, leaders, good citizens and potential scholars. We will be recognized for excellent academic preparation of students, utilizing an integrated case-based approach to learning, and for outstanding community service and research.

## 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 three-year 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 Department of 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 Department of Physical Therapy website (<http://www.ysu.edu/academics/bitonte-college-health-and-human-services/physical-therapy-dpt>) for specific prerequisite requirements.
3. Completion of a bachelor's degree, and all prerequisite courses, prior to starting the program.
4. A recommended GRE score of at least 295 on Part I and 4.0 on Part II.
5. 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.
6. References: 3 total, a combination of physical therapists and faculty.

In certain circumstances, Youngstown State University students may be provisionally accepted into the D.P.T. program as undergraduates during the summer semester of their senior year. They are not, however, admitted as graduate students until their application for graduate program admission has been accepted and approved and they are admitted to the College of Graduate Studies. Under no circumstances will this admission take place prior to their receipt of the bachelor's degree.

## Accreditation Information

The Doctor of Physical Therapy Program at Youngstown State University is accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE), 1111 North Fairfax Street, Alexandria, Virginia 22314; telephone: 703-706-3245; email: [accreditation@apta.org](mailto:accreditation@apta.org); website: <http://www.captionline.org>.

Current accreditation was granted in 2014 for 10 years. The next accreditation visit will be in 2024.

National Physical Therapy Examination pass rates for the last 3 years is 100%.

## Degree Requirements

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

- professional coursework,
- professional conduct,
- clinical affiliations, and
- critical inquiry project.

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.
<b>Level I: Foundation Courses (waiveable)</b>		
BIOL 8868	Human Gross Anatomy 1	4
BIOL 8869	Human Gross Anatomy 2	4
PHYT 8800	Pathology	4
<b>Level II: Core Courses</b>		
PHYT 8901	Clinical Decision Making 1	6
PHYT 8902	Functional Anatomy	3
PHYT 8903	Language, Culture, and Health	2
PHYT 8904	Integrated Clinical Education Experience	6
PHYT 8905	Clinical Decision Making 2	6
PHYT 8906	Critical Inquiry 1	3
PHYT 8907	Special Topics: Pediatrics	3
PHYT 8908	Legal and Ethical Issues in Physical Therapy	2
PHYT 8909	Clinical Decision Making 3	6
PHYT 8910	Critical Inquiry 2	2
PHYT 8911	Special Topics: Geriatrics	2
PHYT 8913	Management and Leadership in Physical Therapy	2
PHYT 8914	Clinical Education 2	4
PHYT 8916	Critical Inquiry 3	2
PHYT 8918	Professional Issues	2
PHYT 8919	Clinical Education 3	6
PHYT 8920	Clinical Education 4	12
PHYT 8923	Community Applications	3
PHYT 8924	Histology	1
PHYT 8925	Applied Neuroscience for Physical Therapists	4
PHYT 8926	Imaging and Lifespan Pathology for PT	2
PHYT 8928	Healthcare Delivery	1
PHYT 8929	Clinical Decision Making 3: Advanced Cases	3
PHYT 8933	Clinical Foundation Skills 1	3
HAHS 5875		3
PHYT 8934	Clinical Foundation Skills 2	2
PHYT 8944	Clinical Decision Making 4-Part 1	3
PHYT 8945	Clinical Decision Making 4-Part 2	3
PHYT 8938	Special Topics in Physical Therapy (This class, Pro Bono Clinic, is taken 4 times for 1 credit each time.)	4
<b>Level III: Electives</b>		
Students are not required to take electives to be granted the D.P.T. degree.		
PHYT 8921	Independent Study	
PHYT 8922	Research	
Total Semester Hours		113

## 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 manage a client in any of the four physical therapy practice patterns: cardiopulmonary, neuromuscular, musculoskeletal and integumentary.
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 generate valid responses to changes in the Healthcare environment.
8. Students will demonstrate effective verbal and written communication skills.

## Graduate Courses

### PHYT 8800 Pathology 4 s.h.

Disease processes and trauma in humans from a structural and functional level; relationship between pathology and clinical signs and symptoms, etiology, differential diagnosis, prognosis, and treatment.

### 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.

**Prereq.:** Admission to DPT program.

### PHYT 8902 Functional Anatomy 3 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.

**Prereq.:** Admission to DPT program.

### PHYT 8903 Language, Culture, and Health 2 s.h.

Examination of cultural theory, language, and application to clinical interactions. Cultural assumptions and patterns of health-related activity related to disability, socioeconomic status, age, gender, ethnicity/race, sexual orientation, and religion.

**Prereq.:** Admission to DPT program.

### PHYT 8904 Integrated Clinical Education Experience 6 s.h.

Initial clinical experience in examining, evaluating and treating basic patients/clients in four practice settings (acute care, outpatient, geriatric and rehab). Part-time, 12 week experience (3 weeks in each setting) under the supervision of a licensed physical therapist.

**Prereq.:** Admission to DPT program.

### 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 8908 Legal and Ethical Issues in Physical Therapy 2 s.h.**

Foundation knowledge and skills necessary for legal and ethical practice of physical therapy. Emphasis on legal principles and concepts; contract, business, and educational law; ethical theory and ethical decision-making approaches; and professional code of ethics.

**Prereq.:** Admission to the 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 8910 Critical Inquiry 2 2 s.h.**

Analysis of literature based on historical and state of the art theories and methods. Evaluate research on selected physical therapy topics. Introduction to research ethics, IRB process and funding. Participation in faculty led, group research projects.

**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.

**Prereq.:** Admission to DPT program.

**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.

**Prereq.:** Admission to DPT program.

**PHYT 8914 Clinical Education 2 4 s.h.**

Second clinical experience in evaluating and treating a diverse caseload of illness/injury prevention, posture and movement dysfunction, and specialty practice. Includes supervision of support personnel, interprofessional evaluation and treatment, and administrative tasks. Six week full-time experience. Grading is S/U.

**Prereq.:** Admission to the DPT program.

**PHYT 8916 Critical Inquiry 3 2 s.h.**

Peer review of formally-presented case reports. Each student will then revise the report and design a clinically-related project based on the findings of the case report. The proposed projects will be presented to an interprofessional audience of faculty and area clinicians for assessment and feedback. Emphasis will be given to formal research proposals, clinical applications and resources for project implementation.

**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.

**Prereq.:** Admission to DPT program.

**PHYT 8919 Clinical Education 3 6 s.h.**

Continuation of clinical experience in evaluating and treating a diverse caseload illness/injury prevention, posture and movement dysfunction, and specialty practice. Includes supervision of personnel, inter professional practice, administrative tasks, and effective time management. Nine week, full-time experience. Grading is S/U.

**Prereq.:** Admission to DPT.

**PHYT 8920 Clinical Education 4 12 s.h.**

Final clinical experience in evaluating and treating a diverse caseload of illness/injury prevention, posture and movement dysfunction, and specialty practice. Collaborative client-oriented practice, professional conduct, and professional development. Fifteen weeks of full-time experience. Grading is S/U. 12 s.h.,.

**Prereq.:** Admission to DPT program.

**PHYT 8921 Independent Study 1-6 s.h.**

Individual study and projects under faculty supervision. May be repeated for a total of six semester hours.

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

**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.

**Prereq.:** Admission to the DPT Program.

**PHYT 8924 Histology 1 s.h.**

The study of the histological basis of human tissue. Emphasis on the relationship between microscopic structure of tissue types and organ function.

**Prereq.:** Admission to DPT program.

**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.

**Prereq.:** Admission to DPT program.

**PHYT 8926 Imaging and Lifespan Pathology for PT 2 s.h.**

Imaging principles, methods and findings to illustrate the relationship to treatment options and plans of care. Case-based examples illustrate the implications for physical therapy practice and referral. Common pathology highly relevant to physical therapy throughout the lifespan are discussed. Introduction to common scenarios for differential diagnosis.

**Prereq.:** Admission to DPT program.

**PHYT 8928 Healthcare Delivery 1 s.h.**

Global study of the delivery of healthcare in a broad-spectrum view. Emphasis is on the societal, economic, legal/ethical and cultural factors that influence healthcare. Multidisciplinary aspects are considered.

**Prereq.:** Admission to DPT program.

**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.

**Prereq.:** Admission to DPT program.

**PHYT 8930 Clinical Decision Making 4: Advanced Cases 2 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.

**Prereq.:** Admission to DPT program.

**PHYT 8932 Pharmacology for PTs 1 s.h.**

The study of pharmacologic principles, classifications and common pharmaceutical agents.

**Prereq.:** Admission to DPT program.



**PHYT 8933 Clinical Foundation Skills 1 3 s.h.**

Theories of professionalism in Physical Therapy practice including APTA/OPTA membership and benefits, fiscal responsibility, core values, professionalism, 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.

**PHYT 8934 Clinical Foundation Skills 2 2 s.h.**

This course is a continuation of PHYT 8933. Theories of professionalism in Physical Therapy practice including 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.

**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 8944 Clinical Decision Making 4-Part 1 3 s.h.**

Topics that integrate practice patterns (musculoskeletal, neuromuscular, cardiopulmonary, and integumentary) such as multiple trauma, burns, amputations, 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 8945 Clinical Decision Making 4-Part 2 3 s.h.**

Topics that integrate practice patterns (musculoskeletal, neuromuscular, cardiopulmonary, and integumentary) such as multiple trauma, burns, amputations, and critical care. Also includes complex cases within routine diagnoses, due to severity, chronicity or comorbidity. Emphasis on outcomes studies.

**Prereq.:** Admission to DPT.

## Graduate Faculty

**James A. Benedict**, PT, Ph.D., Assistant Professor  
Healthcare policy; CVA interventions and outcomes; SCI interventions

**Cara A. Carramusa**, PT, M.S., Assistant Professor  
Geriatrics/older adults; wellness; falls/fall prevention and outcomes; clinical education

**Weiqing Ge**, D.P.T., Ph.D., Associate Professor  
Spinal characteristics; muscle stiffness; responses of paraspinal muscle spindles to forces in animal models

**David William Griswold**, D.P.T., Ph.D., Associate Professor  
Vestibular rehabilitation; neurophysiological effects of manual therapy

**Nancy Crum Landgraff**, PT, Ph.D., Professor, Chair  
Stroke; stroke outcomes; process and assessment of professional education

**Kenneth Learman**, PT, Ph.D., Professor  
Physical therapy interventions for the spine

**Cathy Bieber Parrott**, PT, M.S., Assistant Professor  
Orthopedic-related disability measurement; program assessment.

**Jane Wetzel**, PT, Ph.D., Associate Professor  
Interventions for persons with cardiopulmonary dysfunction

# Educational Specialist in School Psychology

## Introduction

The school psychology program is housed in the Beeghly College of 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 Department of Counseling, School Psychology and Educational Leadership, contact the Department Office at 330-941-3257 or visit our Department website (<http://catalog.ysu.edu/undergraduate/colleges-programs/college-education/department-counseling-special-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.

Jake J. Protivnak, Ph.D.  
Chair / Professor  
Department of Counseling, School Psychology and Educational Leadership  
330-941-1936  
[jjprotivnak@ysu.edu](mailto:jjprotivnak@ysu.edu)



## Program Director

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

Richard W. VanVoorhis, D.Ed., NCSP, Associate Professor  
3212 Beeghly College of Education  
(330) 941-3266  
rwvanvoorhis@ysu.edu

## Accreditation

An application for the initial National Association of School Psychologists (NASP) approval will be submitted during Fall 2017. Programs must first complete a three year cycle producing graduates before application may be made for full NASP approval.

## Admission Requirements

The Youngstown State University school psychology program is a cohort-based 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

**Kathleen Aspiranti**, Ph.D., Assistant Professor  
School-based behavioral and academic interventions; response to intervention; autism spectrum disorders; curriculum-based measurements in reading

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

**Richard W. VanVoorhis**, D.Ed., Associate 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.
<b>Required Courses</b>		
SPSY 7500	Dynamic Assessment 1	3
SPSY 7503	Dynamic Assessment 2	3
SPSY 7506	Consultation Approaches to Treatment in Schools	3
SPSY 7507	Classroom Assessment and Decision Making	3
SPSY 7508	Neuropsychology, Low Incidence and Learning Behavior	3
SPSY 7509	Family Systems Within an Educational Context	3
SPSY 7510	Professional Development Seminar in School Psychology	1
SPSY 7511	School Psychology Internship Studies	3
<b>Practicum Courses</b>		
SPSY 7501	Dynamic Assessment Practicum in School Psychology 1	3
SPSY 7502	Cognitive Observation Practicum	2
SPSY 7504	Dynamic Assessment Child Study Practicum 2	3
SPSY 7505	Dynamic Assessment Advanced Child Study Practicum 3	3
<b>Internship Courses</b>		
SPSY 7512	Internship/Supervised Experience 1	6
SPSY 7513	Internship/Supervised Experience 2	6
SPSY 7514	Internship/Supervised Experience 3	3
SPSY 7515	Advanced Seminar in School Psychology 1	3
SPSY 7516	Advanced Seminar in School Psychology 2	3
Total Semester Hours		54

## Learning Outcomes

1. 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.
3. Candidates will have knowledge and applied skills necessary to promote interventions and instructional support to develop student academic skills.
4. 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.
6. Candidates will have knowledge and applied skills necessary to promote family-school collaboration services.
7. 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 of Psychology Workshop - 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 System-Wide Consultation/Collaboration in the Schools 3 s.h.**

Current educational practices have made collaboration an essential way education professionals do their work. This course will cover the theoretical bases and consultation/collaboration skills necessary for affecting change in the educational environment from a system wide perspective. The aim of this course is to prepare Intervention Services students to function as collaborative consultants promoting systematic and planned strategies for use within the public schools and with families with children with disabilities.

**SPSY 6902 School Organization, Classroom Analysis, Cross-Categorical Settings 3 s.h.**

Provides students in the school psychology program with the opportunity to observe and participate in educational regular education (K-12) and special education settings (SLD, CD, ED, MH, Autistic clinics, for B-21 years of age) in order to understand the organization of educational institutions they will ultimately serve as well as student population characteristics to understand the organization of educational institutions they will ultimately serve.

**SPSY 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.

**SPSY 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.

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

An overview of the professional concerns and issues school psychologists face working in public school systems. Orientation for a supervised internship experience will be discussed; future responsibilities as a professional and staff consultant. Historical, legal and ethical issues pertaining to the role of a school psychologist will be reviewed.

**SPSY 6907 Comprehensive Readings in School Psychology 3 s.h.**

Provides supervised readings and class discussions in preparation for the master's comprehensive examination.

**SPSY 6909 Assessment and Intervention for Students with Low Incidence Disabilities 3 s.h.**

Emphasis will be on current most effective practices of the professional collaboration process across three tiers of service to include specific models and strategies for students in general education and especially those with autism and/or a low incidence disability. Candidates will develop a team training model and will evaluate evidence-based practices.

**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](http://www.platw.org)).

**SPSY 6912 Multilevel Tier Interventions Across General Education and Special Education Programming 3 s.h.**

Direct experiences in planned multilevel interventions across the three tiers of services within educational school systems for regular education and children with disabilities. Participation in RTI team meetings, curriculum academic and applied and functional behavioral analysis, progress monitoring, goal attainment scaling and determining effectiveness of intervention plans will be introduced.

**SPSY 7500 Dynamic Assessment 1 3 s.h.**

This course is designed for the school psychology student and includes the administration and interpretation of intelligence tests. The goal of this course is to provide students with a series of experiences which will lead to student mastery in the administration, scoring, and interpretation of various cognitive instruments and one achievement test.

**Concurrent:** 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 assessment protocols and demonstration of behavioral observation recording.

**Concurrent:** SPSY 7500 and SPSY 7502.

**SPSY 7502 Cognitive Observation Practicum 2 s.h.**

Supervised experience in the administration of various psychological instruments.

**Prereq.:** SPSY 7500 and SPSY 7501 concurrently.

**SPSY 7503 Dynamic Assessment 2 3 s.h.**

This course is designed to provide school psychology candidates with a theoretical foundation and the attainment of assessment skills in the areas of achievement, perceptual-motor, receptive, expressive, written language skills, behavioral, self-concept, emotional, developmental history and adaptive behavior assessment.

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

**Concurrent:** SPSY 7504 and SPSY 7505.

**SPSY 7504 Dynamic Assessment Child Study Practicum 2 3 s.h.**

Candidates are provided supervised practicum experience utilizing a systematic, ecological approach to child study.

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

**Concurrent:** SPSY 7503 and SPSY 7505.

**SPSY 7505 Dynamic Assessment Advanced Child Study Practicum 3 3 s.h.**

Candidates are provided with advanced supervised practicum experiences in school systems in the area of child study.

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

**Concurrent:** SPSY 7503 and SPSY 7504.

**SPSY 7506 Consultation Approaches to Treatment in Schools 3 s.h.**

This course presents assessment procedures for ecological contexts and client needs within school contexts.

**Concurrent:** SPSY 7507.

**SPSY 7507 Classroom Assessment and Decision Making 3 s.h.**

The purpose of this course is to analyze and assess problems related to classroom learning environments, to plan programs to enhance environments, and to implement as well as evaluate plans. The aim of this course is to prepare school psychology students to function effectively within public school classrooms by applying various consultation models.

**Concurrent:** SPSY 7506.

**SPSY 7508 Neuropsychology, Low Incidence and Learning Behavior 3 s.h.**

This course is designed to provide the basics of neuroanatomy, specifically, in terms of brain organization and neurological development.

**Prereq.:** SPSY 7500, SPSY 7501, and SPSY 7502.

**SPSY 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 of various therapeutic techniques to use with families of children with disabilities or other mental health issues.

**SPSY 7510 Professional Development Seminar in School Psychology 1 s.h.**

This course is designed to prepare and ready school psychology candidates for their proposed internship assignment.

**SPSY 7511 School Psychology Internship Studies 3 s.h.**

Supervised readings and class discussions in preparation for a 1400-clock-hour internship in school psychology.

**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 Accountancy

### Program Director

Dr. Raymond J. Shaffer  
rjshaffer@ysu.edu

### Program Description

The Master of Accountancy (MAcc) degree is designed to promote advanced professional competencies and to enhance opportunities for career success. Heavy emphasis is placed on the application of theory to actual practice so that graduates will immediately be able to add value to business organizations. Graduates will meet Ohio and Pennsylvania State Board of Accountancy requirements to sit for the Uniform CPA Examination. In addition, the program will help prepare graduates to sit for other professional exams such as the CMA (Certified Management Accountant) exam. The 30-hour MAcc program can be completed in two semesters of full-time study, or may be completed on a part-time basis.

### Admission Requirements

Students with a minimum overall GPA of 3.0 and a minimum accounting GPA of 3.0 will be granted direct admission into the MAcc Program. Students with an overall GPA or accounting GPA between 2.7 and 2.99 may be granted provisional admission as provided by YSU Graduate College admission policies. Students with a GPA below 2.7, either overall or in accounting, will be required to pass foundational coursework to be considered for admission to the MAcc Program and as a requirement for provisional admission. Students with an overall GPA below 2.7 will be required to take the GRE or GMAT to be considered for admission.

As part of the online Graduate Admission application and College of Graduate Studies requirements, applicants to the MAcc Program should submit a letter of application, a current resume/vita, and at least two letters of recommendation which speak to the applicant's capacity and ability to successfully complete a graduate degree program in accounting.

Students without an undergraduate major in accounting must have completed the following prerequisite coursework with a grade of "C" or better: Intermediate Accounting I & II, Federal Income Taxation, Cost Accounting, Accounting Information Systems (AIS), and Auditing. The Program Director

will oversee the admission process to ensure student success and overall high-quality of the MAcc program.

Students with a major in accounting where the relevant undergraduate accounting coursework (major accounting courses) was taken several years ago and/or do not have recent, substantial, relevant accounting experience (as judged by the Program Director) should consider taking foundational coursework to be successful in the MAcc Program.

## Graduate Faculty

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

**Marsha M. Huber**, Ph.D., Professor  
Tax compliance; education; work-life balance

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

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

## Degree Requirements

COURSE	TITLE	S.H.
Required Courses		20
ACCT 5814	Federal Taxation 2	3
ACCT 5820	Government and Funds Accounting	3
ACCT 6930	Financial Accounting Regulation	3
ACCT 6945	Accounting Ethics and Professionalism	2
ACCT 6970	Capstone Experience	4
MGT 6945	Business Process Integration	2
BUS 6940	Data Analytics and Data Management	3
Recommended Track CPA Public		10
ACCT 6972	Audit Theory Review and Practice	2
ACCT 6974	Financial Accounting Theory Review and Practice	2
Electives		6
Recommended Track CMA-Corporate		10
FIN 6902	Financial Accounting and Finance for Decision Making	1
FIN 6923	Corporate Financial Management	2
FIN 6953	Advanced Financial Analysis	3
MBA 6931	Effective Business Communication	1
Elective		3
Total Required Hours		30
Graduate Elective Course Options		
ACCT 6922	Accounting for Managerial Decisions	2
ACCT 6935	Research Accounting and Tax	3
ACCT 6910	Business Internship	1-3
ACCT 6915	Estate Planning	3
ACCT 6950	Fraud Examination	3
ACCT 6968	Special Topics in Accounting	1-3
FIN 6945	Business Valuation	3

## Learning Outcomes

1. Acquire advanced knowledge of accounting.
2. Recognize ethical issues considered in a business context.
3. Be able to communicate in a business appropriate manner.
4. Utilize relevant information resources to support decision making.

## Graduate Courses

### ACCT 5814 Federal Taxation 2 3 s.h.

Study of current Federal income tax law applying to proprietorships, corporations, S corporations, and partnerships. Includes fundamentals of researching tax law and preparing business tax returns. 2.5 overall GPA.

**Prereq.:** "C" or better in ACCT 4813.

### ACCT 5820 Government and Funds Accounting 3 s.h.

Generally accepted accounting principles for not-for-profit and governmental organizations as established by the appropriately recognized, standard-setting bodies. Includes state and local governments, school districts, colleges and universities, hospitals, voluntary health and welfare organizations, and others.

**Prereq.:** "C" or better in ACCT 3701 and 2.5 overall GPA.

### ACCT 6901 Financial Accounting Decision Making 2 s.h.

A survey of the fundamental concepts of financial accounting employed by general managers.

**Prereq.:** Permit required.

### ACCT 6905 Business Tax Planning and Research 1 3 s.h.

A study of the tax planning process and how it relates to employee and employer matters including, but not limited to, the alternative minimum tax, personal holding companies, unreasonable accumulations of earnings, depreciation recapture, retirement structuring, tax credits, taxation of international persons, and estate tax issues, including both lifetime and testamentary transfers. Paper and electronic research media will be utilized along with various formats for presentation of results.

**Prereq.:** ACCT 5814 or equivalent.

### ACCT 6908 Auditing Theory and Practice 3 s.h.

A study of auditing standards and procedures, use of statistical and other quantitative techniques, and auditing electronic data processing installations. Other topics include practice before the Securities and Exchange Commission, special reporting problems, current developments in auditing, professional ethics and responsibilities, and extensions of the attest function.

**Prereq.:** ACCT 4808 Auditing or equivalent.

### ACCT 6909 Management Information and Control Systems 3 s.h.

A study of the formalized set of interrelated methods, procedures, and equipment utilized in developing, processing, storing, and reporting business financial and statistical information. The major emphasis is on computerized systems, although some attention is also given to manual operations and/or subsystems.

**Prereq.:** MGT 6900 and FIN 6900 or equivalent.

### ACCT 6910 Business Internship 1-3 s.h.

Provides graduate students the opportunity to relate theory to practice through on-the-job work experience with a participating organization. The internship will serve as an elective MBA course.

**Prereq.:** Completion of level I MBA coursework and six semester hours of level II MBA coursework.

### ACCT 6912 Advanced Management and Cost Accounting 3 s.h.

An examination of the managerial uses of accounting information for planning and control, and an investigation of cost accounting theory and practice.

**Prereq.:** ACCT 3711 Cost Accounting or equivalent.

### ACCT 6915 Estate Planning 3 s.h.

A study of estate and gift tax law including tax return preparation. Emphasis on the importance of estate planning and the devices available for use in such planning, and effective uses of lifetime gifts, trusts, life insurance, pension plans, profit sharing, and other fringe benefit plans. The effects of state inheritance tax and property laws upon estate planning will be included.

**Prereq.:** "C" or better in ACCT 4813 or equivalent.

### ACCT 6917 MAcc Income Tax Preparation 3 s.h.

Students prepare basic and complex tax returns (including small business and rental returns) for taxpayers from the university and community, provide guidance to undergraduate students, and assist in training and administration of the VITA (Volunteer Income Tax Preparation) program, including efilng returns.

**Prereq.:** graduate standing.

### ACCT 6922 Accounting for Managerial Decisions 2 s.h.

Capital budgeting. Product costing. Pricing. Relevant and timely accounting information associated with these is necessary to make informed decisions. To improve their managerial decision making capabilities, participants will learn to examine, prepare and interpret accounting reports from the perspective of the manager of an organization.

**Prereq.:** Graduate standing.

### ACCT 6925 Oil and Gas Accounting 3 s.h.

A study of the accounting and taxation principles and procedures of the petroleum industry. Topics include exploration, leasing, drilling and production problems.

**Prereq.:** "C" or better in ACCT 2603 or FIN 6902.

### ACCT 6930 Financial Accounting Regulation 3 s.h.

The major objective of the course is to enable students to understand both the theoretical and practical aspects of compliance and regulation. Emphasis is on financial statement regulation and standard setting, including differences in financial measurement and reporting practices that exist in the U.S. and internationally. The course will examine how effective governance systems are implemented within all forms of organizations.

**Prereq.:** Graduate standing.

### ACCT 6935 Research Accounting and Tax 3 s.h.

A study of the practical research process, providing useful guidance and information in conducting professional accounting and tax research. A broad range of case analyses allows a focus on current topics in the accounting profession.

**Prereq.:** "C" or better in ACCT 3702 and ACCT 4813.

### ACCT 6945 Accounting Ethics and Professionalism 2 s.h.

This course will include coverage of professional ethics in accounting, practice development in accounting (including services marketing), and accounting-related career success skills. The course will be a combination of personal reflection, cases, lectures, outside guests (from accounting firms and entities and those that hire them), and a project identifying a development challenge faced by accountants with recommendations on what should be done.

**Prereq.:** Graduate Standing.

### ACCT 6950 Fraud Examination 3 s.h.

A study of occupational fraud and abuse. Topics include asset misappropriation schemes, corruption, and fraudulent statements, including fraudulent financial statements. Coverage includes implications for the fraud examiner and corporate management.

**Prereq.:** ACCT 2602 or FIN 6902.

### ACCT 6960 Seminar in Accounting 2 s.h.

Specific topics selected by the staff from timely and controversial work published in the field.

**Prereq.:** All core courses, plus at least six hours (6900-level) in accounting or permission of instructor.

### ACCT 6968 Special Topics in Accounting 1-3 s.h.

Topics may vary from semester to semester and will be announced with prerequisites and hours. May be repeated.

### ACCT 6968R Special Topics in Accounting Integrating Design Thinking with Accounting Decision Making 1-3 s.h.

Topics may vary from semester to semester and will be announced with prerequisites and hours. May be repeated.

### ACCT 6968T Special Topics in Accounting Integrated Design Think 1-3 s.h.

Topics may vary from semester to semester and will be announced with prerequisites and hours. May be repeated.

### ACCT 6970 Capstone Experience 4 s.h.

A culmination of learning experiences necessary for accounting professionals. Strong emphasis will be placed upon the CPA/CMA exam experience. An integrative, team-based project will be required. Program level : ACCT 5814, ACCT 6930, completion of at least 12 hours of MAcc coursework.



**ACCT 6972 Audit Theory Review and Practice 2 s.h.**

A culmination of learning experiences in the auditing area necessary for accounting professionals, with a strong emphasis placed upon the CPA (Certified Public Accountant) exam in the financial accounting areas. An integrative, practice-based project in auditing will be required.

**Prereq.:** undergraduate major in accounting or its equivalent.

**ACCT 6974 Financial Accounting Theory Review and Practice 2 s.h.**

A culmination of learning experiences in the financial accounting area necessary for accounting professionals, with a strong emphasis placed upon the CPA (Certified Public Accountant) exam in the financial accounting area. An integrative, practice-based project in financial accounting will be required.

**Prereq.:** undergraduate major in accounting or its equivalent.

**ACCT 6975 Business Tax Planning 2 2 s.h.**

This course continues the study of income tax laws concerning corporations generally, including Subchapter S corporations, corporate reorganizations, partnership taxation, and tax administration and practice.

**Prereq.:** ACCT 6905.

**ACCT 6980 Governmental and Nonprofit Accounting 2 s.h.**

A study of accounting systems for federal, state, and local governmental agencies and other not-for-profit organizations. (Not available for credit to students who have had ACCT 4820.)

**Prereq.:** FIN 6900 Government and Funds Accounting or equivalent.

**ACCT 6996 Research Problems 1-4 s.h.**

Special research project under the supervision of a graduate faculty member. Credit will be determined in each case in light of the nature and extent of the project.

**Prereq.:** Fifteen hours of level II MBA coursework or permission of MBA director.

## Master of Arts in American Studies

### Program Director

Dolores V. Sisco  
245 DeBartolo Hall  
(330) 941-3422  
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.

### 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

**Donna M. DeBlasio, Ph.D., Professor**

Twentieth-century US history; applied history; oral history

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

Community health; life course issues; teaching effectiveness

**Martha Pallante, Ph.D., Professor**

Early American studies; material culture; pedagogy

**Linda J. Strom, Ph.D., Associate Professor**

## Degree Requirements

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

COURSE	TITLE	S.H.
<b>Required Core Courses</b>		
AMER 6900	Approaches to American Studies	3
AMER 6990	Independent Project <sup>1</sup>	3
<b>Practice Area</b>		
Select two credits from one of the following tracks:		6
Teaching Track		
Select two of the following:		
AMER 6970	Teaching Working-Class Studies	
AMER 6975	Interdisciplinary Teaching	
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	Curriculum Development in VBME	
AMER 6930	Humanities in the Community	
AMER 6980	Public Humanities Internship	
<b>Focus Area</b>		
Select at least four 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		
FOUN 6905	Educational Challenges in Historical Perspective	
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 Studies		
AMER 5850	Class and Culture	
AMER 6910	Introduction to Working-Class Studies	



AMER 6970	Teaching Working-Class Studies	
ENGL 6923	Working Class Literature	
HIST 6939	Labor in US History	
HIST 6945	Interpretation and Preservation of the Industrial Built Environment	
<b>Public History</b>		
CJFS 6960	Program Planning and Evaluation	
EDAD 6933	Educational Policy, Politics, and 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	Museum Curation and Interpretation 1	
HIST 6956	Museum Curation and Interpretation 2	
HIST 6957	Special Topics in Applied History	
<b>Distribution Requirement</b>		
Select four additional course with at least one from each of the other focus areas above.		12
Total Semester Hours		36

- <sup>1</sup> The required course, AMER 6990 Independent Project in American Studies, requires each student to complete an independent project, such as:
- a major research project,
  - the design and promotion of a special exhibit at a museum,
  - the development of an education program at a local library, or
  - the completion of a planning project in cooperation with a local community development agency.

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

## Learning Outcomes

1. 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.
2. 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.
4. 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 5845 *Work in America* 3 s.h.

Examines the changing characteristics, expectations, and representations of work in America. Includes the exploration of demographic, historic, economic, technological, sociological, religious, ethical, popular, and poetic perspectives on work.

**Prereq.:** junior standing.

**Cross-listed:** MGT 5845.

### AMER 5850 *Class and Culture* 3 s.h.

Theories of social class structure and formation, relationships between class and culture, representations of class and work, intersections of class with other aspects of cultural identity (race, gender, sexuality, place), and theories and methods of working-class studies.

**Prereq.:** graduate standing or AMER 3701.

### AMER 6900 *Approaches to American Studies* 3 s.h.

Introduction to American studies with emphasis on history of the field, interdisciplinary approaches, and cultural diversity.

### AMER 6910 *Introduction to Working-Class Studies* 3 s.h.

Introduction to developments, approaches, and issues in new working-class studies, including intersections of class with other categories of identity, disciplinary and interdisciplinary perspectives, representations of the working class in the arts and media, and political and economic constructions of class.

### AMER 6930 *Humanities in the Community* 3 s.h.

Opportunities, challenges, and strategies for developing, promoting, and implementing public humanities projects in various settings, including community development and organizing, community-based adult education, and programs in museums and other public humanities organizations.

**Prereq.:** AMER 6900.

### AMER 6970 *Teaching Working-Class Studies* 3 s.h.

Interdisciplinary teaching strategies focused on incorporating attention to work, class, diversity, and local history and culture into K-12 and college courses.

### AMER 6975 *Interdisciplinary Teaching* 3 s.h.

Introduction to interdisciplinarity and its application in the classroom with emphasis on integration of humanities and social sciences.

### AMER 6980 *Public Humanities Internship* 3 s.h.

Supervised work-and-learning experience in American studies under the direction of an American studies core faculty member and an employee of a participating organization.

### AMER 6982 *Special Topics* 3 s.h.

Specialized topics selected by the staff. May be repeated once with a different topic.

**Prereq.:** Permission of the American studies program coordinator and instructor.

### AMER 6985 *Independent Study* 3 s.h.

Individual study in American studies or a related discipline under the supervision of a faculty member. May be repeated once.

**Prereq.:** Permission of the American studies program coordinator and instructor.

### 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 Art Education

### Program Director

Samuel Adu-Poku, Ph.D., Professor  
4089 Bliss Hall  
(330) 941-1866  
sadupoku@ysu.edu

## Program Description

The Master of Arts in Art Education program is designed to give art educators an opportunity to further develop artistic, pedagogical, scholarly, research, and leadership capabilities through in-depth study in studio, art history and art education theory. The M.A. in Art Education can be applied towards doctoral study, National Board Certification, Ohio Senior Educator or Lead Educator Licensure, and professional licensure in other states. Special emphasis is placed on the extension of specialized studio experiences in a variety of areas, including:

- painting,
- printmaking,
- sculpture,
- ceramics,
- graphic design, and
- photography.

Coursework combines studio practice and art history with art education theory, research, and classroom pedagogy to strengthen the capacities of teachers to create dynamic K-12 visual art programs. This integrated approach to the exploration of studio, arts-based educational research, technological, historical, socio-cultural, and contemporary issues in art and art education leads students to a fuller understanding of the challenges and opportunities of contemporary art education.

## Accreditation

The Master of Arts in Art Education is accredited by the National Association of Schools of Art and Design (NASAD).

## Application Deadline

Student	Deadline
Summer Admission	February 15
Fall Admission	May 15
Spring	October 15

## Admission Requirements

In addition to the admission requirements of the College of Graduate Studies, applicants must meet the following requirements:

- an undergraduate degree in art education and teacher certificate or professional teaching license;
- a cumulative undergraduate grade point average of 3.00 on a 4.00 scale;
- a minimum of two years of teaching experience preferred;
- three original letters of recommendation;
- 10-12 color images of personal artwork (digital copy);
- a statement of purpose of approximately 250 words indicating intent and proposed area of specialization within art studio and capstone project (studio project track or graduate thesis track);
- a personal interview with the Program Director and the Graduate Program Committee in the Department of Art may be required.

In some cases, remedial coursework in undergraduate studio art may be required by the Graduate Program Committee in the Department of Art before regular admission is granted. To obtain regular admission, the candidate must make up deficiencies by taking the appropriate undergraduate studio courses without graduate credit.

## Graduate Faculty

**Samuel Adu-Poku**, Ph.D., Professor

Art education; curriculum development; multicultural education; teacher education

**Anthony Armeni**, M.F.A., Part-time Faculty  
Sculpture

**Stephen Chalmers**, M.F.A., Associate Professor  
Photography

**Joy Christiansen Erb**, M.F.A., Associate Professor  
Photography; portraiture; installation

**Dragana Crnjak**, M.F.A., Associate Professor  
Painting; narrative work; drawing

**Joe D'Uva**, M.F.A., Associate Professor  
Printmaking

**Johnathan Farris**, Ph.D., Assistant Professor  
Art History

**Rich Helfrich**, M.F.A., Assistant Professor  
Graphic Design

**Lillian Lewis**, Ph.D., Assistant Professor  
Art Education

**Missy McCormick**, M.F.A., Associate Professor  
3D studies; ceramics

**Christine E. McCullough**, M.F.A., Professor  
Painting; drawing

**Jonathan Dana Sperry**, M.F.A., Associate Professor  
Digital Media

**R.J. Thompson**, M.F.A., Assistant Professor  
Graphic Design

**Robert Twomey**, Ph.D., Assistant Professor  
Digital Media

## Degree Requirements

Students must complete a minimum of 36 semester hours of graduate coursework consisting of:

- a graduate studio core,
- an art education core,
- a graduate research course,
- an art history elective, and
- a capstone project in the form of either a written thesis or a graduate studio art exhibition.

Research projects are supervised by art education and studio art faculty and should be oriented toward the scholarly integration of theory and practice. As a culminating experience, students must complete either an exhibition combined with a professional talk and an artist's statement, or an oral examination based on a written thesis.

## Research Thesis Track

COURSE	TITLE	S.H.
<b>Graduate Studio Core</b>		
Art Studio Courses		
Select a minimum of 18 semester hours in two and/or three-dimensional Art Studio Courses including at least 9 hours in a single graduate studio area of concentration and an additional 9 hours of electives to be chosen from other graduate studio areas to provide breadth. <sup>1</sup>		18
ART 6910 & ART 6911 & ART 6912	Studio Problems in Sculpture and Studio Problems in Sculpture and Studio Problems in Sculpture	

ART 6930 & ART 6931 & ART 6932	Studio Problems in Ceramics and Studio Problems in Ceramics and Studio Problems in Ceramics
ART 6940 & ART 6941 & ART 6942	Studio Problems in Printmaking and Studio Problems in Printmaking and Studio Problems in Printmaking
ART 6950 & ART 6951 & ART 6952	Studio Problems in Painting and Studio Problems in Painting and Studio Problems in Painting
ART 6970 & ART 6971 & ART 6972	Studio Problems in Photography and Studio Problems in Photography and Studio Problems in Photography
ART 6980 & ART 6981 & ART 6982	Studio Problems Digital Media and Studio Problems Digital Media and Studio Problems Digital Media

**Art Education and Art History Core**

Select a minimum of 12-15 semester hours including a minimum of 15 12-15 hours in art education theory and an educational research course:

ART 6920	Historical and Philosophical Foundations of Art Education
ART 6921	Current Issues, Perspectives, and Curriculum Practices in Art Education
ART 6922	Graduate Seminar in Art Education

**Educational Research Course**

FOUN 6904	Introduction to Educational Research
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**Art History Electives**

Select one of the following: 3

ART 5840	Topics in Ancient Art
ART 5881	Twentieth Century Art to 1960
ART 5882	Twentieth Century Art from 1960
ART 6960	Special Topics in Art History

**Research Thesis**

Select 3-5 s.h. variable credits in field research or studio production and a 3-5 written thesis based on individual need and research focus.

ART 6923	Graduate Art Thesis
or ART 6924	Graduate Studio Project and Exhibition

Total Semester Hours 36

<sup>1</sup> Studio courses may be repeated and must be selected from more than one area of concentration. Studio courses may be taken in increments of 1-3 s.h. variable credits with faculty approval.

## Non-Research Thesis Track

COURSE	TITLE	S.H.
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**Graduate Studio Core**

Art Studio Courses 18

Select a minimum of 18 semester hours in two and/or three-dimensional Art Studio Courses including at least 9 hours in a single graduate studio area of concentration and an additional 9 hours of electives to be chosen from other graduate studio areas to provide breadth:<sup>1</sup>

ART 6910 & ART 6911 & ART 6912	Studio Problems in Sculpture and Studio Problems in Sculpture and Studio Problems in Sculpture
ART 6930 & ART 6931 & ART 6932	Studio Problems in Ceramics and Studio Problems in Ceramics and Studio Problems in Ceramics
ART 6940 & ART 6941 & ART 6942	Studio Problems in Printmaking and Studio Problems in Printmaking and Studio Problems in Printmaking

ART 6950 & ART 6951 & ART 6952	Studio Problems in Painting and Studio Problems in Painting and Studio Problems in Painting
ART 6970 & ART 6971 & ART 6972	Studio Problems in Photography and Studio Problems in Photography and Studio Problems in Photography
ART 6980 & ART 6981 & ART 6982	Studio Problems Digital Media and Studio Problems Digital Media and Studio Problems Digital Media

**Art Education and Art History Core**

Select a minimum of 10-15 semester hours including a minimum of 15 10-15 hours in art education theory and an educational research course:

ART 6920	Historical and Philosophical Foundations of Art Education
ART 6921	Current Issues, Perspectives, and Curriculum Practices in Art Education
ART 6922	Graduate Seminar in Art Education
ART 6923	Graduate Art Thesis

**Educational Research Course**

FOUN 6904	Introduction to Educational Research
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**Art History Electives**

Select one of the following: 3

ART 5840	Topics in Ancient Art
ART 5881	Twentieth Century Art to 1960
ART 5882	Twentieth Century Art from 1960
ART 6960	Special Topics in Art History

**Capstone Studio Project**

ART 6924	Graduate Studio Project and Exhibition	5
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Total Semester Hours 36

<sup>1</sup> Studio courses may be repeated and must be selected from more than one area of concentration. Studio courses may be taken in increments of 1-3 s.h. variable credits with faculty approval.

## Learning Outcomes

1. Candidates demonstrate understanding of the connections between artistic and pedagogical practice, and can carry out Arts-Based or action research in their classrooms.
2. Candidates demonstrate proficiency in personal artistic practice, including technical expertise and the capacity for content expression.
3. Candidates can discriminate between and synthesize multiple sources of information to construct and demonstrate an understanding of the Field of Art Education, its history, and its place in the American educational system and political economy.

## Graduate Courses

**ART 5840 Topics in Ancient Art 3 s.h.**

The art and architecture of the ancient cultures of the Mediterranean region and the Near East. Topics vary by semester, and include Egypt, the Ancient Near East, Greece, and Rome. May be taken twice if content is different.

**Prereq.:** Junior standing.

**ART 5840C Topics in Ancient Art Greek Art and Architecture 3 s.h.**

The art and architecture of the ancient cultures of the Mediterranean region and the Near East. Topics vary by semester, and include Egypt, the Ancient Near East, Greece, and Rome. May be taken twice if content is different.

**Prereq.:** Junior standing.

**ART 5850 Topics in Painting and Drawing 3 s.h.**

Selected topics in advanced painting and drawing. Specific content varies by semester and includes Landscape and Interiors; Portraiture; and Personal Narrative. May be repeated with a different topic for a total of three times.

**Prereq.:** ART 2650 or portfolio presentation and permission of instructor.

**ART 5860 Topics in Design 3 s.h.**

Selected topics in graphic design including typography, layout and computer applications. May be repeated for a total of three times with different topics.

**Prereq.:** Permission of instructor and portfolio.

**ART 5881 Twentieth Century Art to 1960 3 s.h.**

A survey of the visual arts history of the 20th century beginning with its 19th century roots. The influential artists, movements, and motivating theories will be covered against a backdrop of world events. Primary emphasis is placed upon French Impressionism, German Expressionism, Fauvism, Surrealism, and American Abstract Expressionism.

**Prereq.:** ART 1542 or permission of instructor.

**ART 5882 Twentieth Century Art from 1960 3 s.h.**

A survey of the visual arts history of the late 20th century beginning with those ideas and trends which followed Abstract Expressionism. Beginning with the late 1950s every principle artistic movement from Pop through post-Modernism will be explored against a backdrop of Post-War world events.

**Prereq.:** ART 1542 or permission of instructor.

**ART 6910 Studio Problems in Sculpture 1-3 s.h.**

Individual research of the technical, visual, conceptual, and aesthetic issues of contemporary sculpture. Professional studio practices are explored as well as conceptual art issues dealing with non-traditional formats, idea-oriented artworks and the notion of 'research', and the blending of theoretical and material practice. Students develop a self-critical, articulate, and individual approach to solving aesthetic solutions to self-determined visual narratives and challenges. Repeatable for a maximum of six s.h.

**Prereq.:** Permission of instructor.

**ART 6911 Studio Problems in Sculpture 1-3 s.h.**

Emphasis on building on ideas researched in ART 6910 to develop greater conceptual, aesthetic, and technical sophistication. Directed readings and writing assignments in addition to professional studio practice are used to promote further development of individual approaches to solving aesthetic solutions to self-determined visual narratives and challenges. May be repeated for a maximum of six s.h.

**Prereq.:** ART 6910.

**ART 6912 Studio Problems in Sculpture 1-3 s.h.**

Students engage in the final phase of conceptual and technical refinement that will result in a cohesive body of work that demonstrates their conceptual direction and technical proficiency. Studio practice together with intense analytical discourse of current studio work and exhibition thesis drafts prepare students for the visual, written, and oral defense components of their ART 6924 capstone course experience. May be repeated for a maximum of 6 s.h.

**Prereq.:** ART 6911.

**ART 6920 Historical and Philosophical Foundations of Art Education 3 s.h.**

Evaluation of the historical, chronological, and philosophical developments in art education with emphasis on significant trends and movements which have impacted its growth and structure.

**Prereq.:** Graduate status.

**ART 6921 Current Issues, Perspectives, and Curriculum Practices in Art Education 3 s.h.**

A survey of current issues and legislative mandates that affect art education curriculum. Students will gain insight into curriculum development, implementation, and evaluation of art education programs.

**Prereq.:** Graduate status.

**ART 6922 Graduate Seminar in Art Education 3 s.h.**

Explores contemporary events, theories, issues, trends, and practices that are influencing the field of art education.

**Prereq.:** Graduate status.

**ART 6923 Graduate Art Thesis 1-5 s.h.**

Students will develop a thesis in one of three modes: scholarly thesis, studio inquiry and essay, or teaching project and report. Repeatable for up to 5 total semester hours.

**Prereq.:** Graduate status.

**ART 6924 Graduate Studio Project and Exhibition 1-5 s.h.**

A professional art exhibition and written artist statement as an exit requirement and an alternative to the graduate research thesis option.

Activities will include design and production of artworks for exhibition, directed readings, portfolio development, written assignments including an artist statement, oral defense of exhibition, and faculty review. The 5 s.h. requirement can be fulfilled through enrollment in ART 6924 over successive semesters at between 1-5 s.h. credit; however, students are encouraged to complete the course within two semesters.

**Prereq.:** 18 studio credits.

**ART 6930 Studio Problems in Ceramics 3 s.h.**

Individual research in spatial arts imagery. Concentration on individual study in ceramic construction, firing process and calculation, formulation and firing of clay bodies, and low-fire and high-fire glaze systems. May be repeated for a maximum of six semester hours of credit.

**Prereq.:** Permission of instructor and evidence of previous work.

**ART 6931 Studio Problems in Ceramics 1-3 s.h.**

Continuation of ART 6930. May be repeated for a maximum of six semester hours of credit.

**Prereq.:** ART 6930.

**ART 6932 Studio Problems in Ceramics 1-3 s.h.**

Continuation of ART 6931. May be repeated for a maximum of six semester hours of credit.

**Prereq.:** ART 6931.

**ART 6940 Studio Problems in Printmaking 3 s.h.**

Individual research into monoprinting, intaglio etching, relief printing, silkscreen, lithography, and monotype. May be repeated for a maximum of six semester hours.

**Prereq.:** Portfolio presentation and permission of instructor.

**ART 6941 Studio Problems in Printmaking 1-3 s.h.**

Continuation of ART 6940. May be repeated for a maximum of six semester hours.

**Prereq.:** ART 6940.

**ART 6942 Studio Problems in Printmaking 1-3 s.h.**

Continuation of ART 6941. May be repeated for a maximum of six semester hours.

**Prereq.:** ART 6941.

**ART 6950 Studio Problems in Painting 3 s.h.**

Individual research of two-dimensional form through various media, including oil, acrylic, watercolor, collage, etc. May be repeated for a maximum of six semester hours credit.

**Prereq.:** Permission of instructor and evidence of previous work.

**ART 6951 Studio Problems in Painting 3 s.h.**

Continuation of ART 6950. May be repeated for a maximum of six semester hours credit.

**Prereq.:** ART 6950.

**ART 6952 Studio Problems in Painting 1-3 s.h.**

Continuation of ART 6951. May be repeated for a maximum of six semester hours credit.

**Prereq.:** ART 6951.

**ART 6960 Special Topics in Art History 3 s.h.**

Study in one of the many areas of art history. May be taken up to three times for credit if the topic is not repeated.

**ART 6960D Special Topics in Art History South and Southeast Asian Art and Architecture 3 s.h.**

Study in one of the many areas of art history. May be taken up to three times for credit if the topic is not repeated.

**ART 6970 Studio Problems in Photography 3 s.h.**

Individual research of photography through selected technical and aesthetic photographic topics using a variety of approaches for advanced fine art applications. May be repeated for a maximum of six semester hours of credit.

**Prereq.:** Permission of instructor and documentation of previous work.



**ART 6971 Studio Problems in Photography 3 s.h.**

Continuation of ART 6970. May be repeated for six semester hours of credit.  
**Prereq.:** ART 6970.

**ART 6972 Studio Problems in Photography 3 s.h.**

Continuation of ART 6971. May be repeated for six semester hours of credit.  
**Prereq.:** ART 6971.

**ART 6980 Studio Problems Digital Media 3 s.h.**

Individual research in digital forms of expression through various media, including but not limited to printed digital collage, video and Internet-based projects. May be repeated for a maximum of six semester hours of credit.  
**Prereq.:** Permission of instructor and documentation of previous work.

**ART 6981 Studio Problems Digital Media 3 s.h.**

Continuation of ART 6980. May be repeated for six semester hours of credit.  
**Prereq.:** ART 6980.

**ART 6982 Studio Problems Digital Media 3 s.h.**

Continuation of ART 6981. May be repeated for six semester hours of credit.  
**Prereq.:** ART 6981.

**ART 6990 Interdisciplinary Studio 1-6 s.h.**

Self-motivated graduate study informed by contemporary theory and discourse. Students follow a personal, self-proposed, conceptual direction and work independently, supported by faculty. First year placed on challenging traditional ideas about creative practice by connecting and integrating various creative processes, materials and methodologies. Through scheduled critiques students present and discuss their studio research with peers and faculty. Total of 6 s.h. with a minimum of two different faculty first year fall semester.  
**Prereq.:** Admission to MFA program.

**ART 6991 Interdisciplinary Studio 2 1-9 s.h.**

Continuation of ART 6990. Self-motivated, individual studio practice. At the end of the second semester students are assessed on the ability to integrate self-directed research with the ideas and concepts proposed in the Interdisciplinary Seminar and Strategies courses. Second semester culminates in a first year group exhibition. Total of 1 to 9 s.h. with a minimum of two different faculty first year second semester.  
**Prereq.:** ART 6990.

**ART 6992 Interdisciplinary Studio 3 1-6 s.h.**

Continuation of ART 6991. Self-motivated, individual studio practice. In the second year students begin research and practice leading to the MFA Thesis Project and Capstone. Total of 1 to 6 s.h. with a minimum of two different faculty second year fall semester.  
**Prereq.:** ART 6991.

**ART 6992A Interdisciplinary Studio 3 1-6 s.h.**

Continuation of ART 6991. Self-motivated, individual studio practice. In the second year students begin research and practice leading to the MFA Thesis Project and Capstone. Total of 1 to 6 s.h. with a minimum of two different faculty second year fall semester.  
**Prereq.:** ART 6991.

**ART 6992B Interdisciplinary Studio 3 1-6 s.h.**

Continuation of ART 6991. Self-motivated, individual studio practice. In the second year students begin research and practice leading to the MFA Thesis Project and Capstone. Total of 1 to 6 s.h. with a minimum of two different faculty second year fall semester.  
**Prereq.:** ART 6991.

**ART 6992D Interdisciplinary Studio 3 1-6 s.h.**

Continuation of ART 6991. Self-motivated, individual studio practice. In the second year students begin research and practice leading to the MFA Thesis Project and Capstone. Total of 1 to 6 s.h. with a minimum of two different faculty second year fall semester.  
**Prereq.:** ART 6991.

**ART 6992E Interdisciplinary Studio 3 1-6 s.h.**

Continuation of ART 6991. Self-motivated, individual studio practice. In the second year students begin research and practice leading to the MFA Thesis Project and Capstone. Total of 1 to 6 s.h. with a minimum of two different faculty second year fall semester.  
**Prereq.:** ART 6991.

**ART 6992F Interdisciplinary Studio 3 1-6 s.h.**

Continuation of ART 6991. Self-motivated, individual studio practice. In the second year students begin research and practice leading to the MFA Thesis Project and Capstone. Total of 1 to 6 s.h. with a minimum of two different faculty second year fall semester.  
**Prereq.:** ART 6991.

**ART 6992G Interdisciplinary Studio 3 1-6 s.h.**

Continuation of ART 6991. Self-motivated, individual studio practice. In the second year students begin research and practice leading to the MFA Thesis Project and Capstone. Total of 1 to 6 s.h. with a minimum of two different faculty second year fall semester.  
**Prereq.:** ART 6991.

**ART 6993 Interdisciplinary Studio 4 1-9 s.h.**

Continuation of ART 6992. Self-motivated, individual studio practice. In the final semester students are focused on studio research and production of work for their MFA Thesis Project and Capstone. Total of 9 s.h. with a minimum of two different faculty second year spring and final semester.  
**Prereq.:** ART 6992.

**ART 6994 Strategies in Interdisciplinary Practice 1 3 s.h.**

Through a wide range of readings and presentations, this course will explore the significant moments, theoretical foundations and current trends within interdisciplinary and collaborative visual art practices. These explorations will be paired with a series of long and short projects that demystify strategies and problems within the range of visual art practices discussed. The course will also discuss modes of content communication that exist across the different disciplines such as the use of specific symbols, materials, processes and context. While ideas and readings may link with the MFA seminar, this course is designed to give students a solid theoretical and practical foundation in an interdisciplinary studio art practice.  
**Prereq.:** Admission to MFA program.

**ART 6995 Strategies in Interdisciplinary Practice 2 3 s.h.**

Through a wide range of readings and presentations, this course will expand on the dialogue from Strategies in Interdisciplinary Practice 1. These explorations will be paired with a series of long and short projects that demystify strategies and problems within the range visual art practices discussed. The course will also discuss modes of content communication that exist across the different disciplines, such as the use of specific symbols, materials, processes and context. While ideas and reading in this course may link and connect with the MFA seminar, this course is designed to build upon the solid theoretical and practical foundation built in Strategies in Interdisciplinary Practice.  
**Prereq.:** ART 6994.

**ART 6996 Seminar in Interdisciplinary Theory 1 3 s.h.**

Covering the key concepts and topics of modern and contemporary critical theory, the course examines various aesthetic, cultural, political climates in relation to developments of interdisciplinary art practice. MFA Seminar should be taken in sequence and serve as a dynamic forum for student research, critique, discussion, and the conceptual foundation for their individual studio practices.  
**Prereq.:** Admission to MFA program.



**ART 6997 Seminar Interdisciplinary Theory 2 3 s.h.**

Topic will rotate each semester and address key concepts and topics of modern and contemporary critical theory. The course provides various perspectives towards the understanding of interdisciplinary art practice and critical discourses within contemporary art culture. Students will investigate interconnections between philosophical and theoretical issues and the ways they inform and impact interdisciplinary art practice today. MFA Seminar should be taken in sequence and serve as a foundation for individual studio practices.

**Prereq.:** ART 6996.

**ART 6998 Seminar Interdisciplinary Theory 3 3 s.h.**

Topics will vary each semester and address key concepts and topics of modern and contemporary critical theory. The course provides ongoing discussion surrounding the understanding of interdisciplinary art practice and critical discourses within contemporary art culture. Students will investigate interconnections between philosophical and theoretical issues and the ways they inform and impact interdisciplinary art practice today. As the last course within MFA Seminary sequence, it serves as a foundation for individual studio practice.

**Prereq.:** ART 6996.

**ART 6999 MFA Thesis Project and Capstone Research 6 s.h.**

Programmatic exit requirement and culmination of the 60 credit MFA in Interdisciplinary Visual Arts. Activities include design and production of artworks for exhibition, directed readings, writing assignments including thesis and portfolio development, professional practices, exhibition design, oral thesis defense and faculty review.

**Prereq.:** permission of graduate advisor.

## Master of Arts in Economics

### Program Director

Dr. Ebenge Usip  
307 DeBartolo Hall  
(330) 941-1682  
eeusip@ysu.edu

### Program Description

The Master of Arts in economics program is designed to provide students with a background in applied economics which would lead to professional employment in business, government, or education. Special emphasis is placed on the use of data analysis to investigate public policy issues and business decisions. Supplemented by upper-level courses in mathematics, the program can also help prepare students for doctoral study in economics or related fields.

### Admission Requirements

In addition to the College of Graduate Studies admission requirements, applicants must have completed at least one course in each of the following areas:

- principles of microeconomics,
- principles of macroeconomics,
- statistics, and
- calculus.

Students who do not meet the requirements may be admitted on a provisional basis. Students with provisional admission are required to take undergraduate coursework to fulfill the admission requirements. With the permission of the Graduate Coordinator they may also be allowed to simultaneously take a limited number of masters-level courses.

### Combined Bachelors/Masters Program

Highly qualified undergraduate students can apply for admission into the combined "4+1" Bachelors/Masters program for the MA in Economics. See

the description of the "4+1" program (<http://catalog.yzu.edu/undergraduate/colleges-programs/college-liberal-arts-social-sciences/departments-economics/4-1-bachelors-masters-program>) in the undergraduate catalog.

### Admission Requirements

In addition to the College of Graduate Studies admission requirements, applicants must have completed at least one course in each of the following areas:

- principles of microeconomics,
- principles of macroeconomics,
- statistics, and
- calculus.

Students who do not meet the requirements may be admitted on a provisional basis. Students with provisional admission are required to take undergraduate coursework to fulfill the admission requirements. With the permission of the Graduate Coordinator they may also be allowed to simultaneously take a limited number of masters-level courses.

International students from Jilin University of Economics and Finance and National Chiayi University may take up to 9 semester hours of graduate credit as an undergraduate if requirements are met in outlined agreement.

### Graduate Faculty

**Jolien A. Helsel**, Ph.D., Assistant Professor  
Regional economics; spatial econometrics

**Ou Hu**, Ph.D., Professor  
Financial markets; international finance; asset pricing

**Tomi P. Ovaska**, Ph.D., Professor  
Public finance; comparative economic systems; entrepreneurship; international trade; behavioral economics

**Joseph Palardy**, Ph.D., Professor  
Macroeconomics; time series econometrics

**Dennis A. Petruska**, Ph.D., Professor  
Applied macroeconomics; financial markets; time-series econometrics

**Tod Porter**, Ph.D., Professor, Chair  
Labor markets; school finance; computer-aided instruction

**Albert J. Sumell**, Ph.D., Professor  
Urban, housing, and environmental economics

**Yogesh Uppal**, Ph.D., Professor  
Applied microeconomics; applied econometrics; public economics; political economy; development economics

**Yaqin Wang**, Ph.D., Professor  
Futures markets; behavioral economics

### Degree Requirements

Students must complete 30 semester hours of graduate credit with a grade point average of 3.0 or higher for the M.A. in economics. The requirements for the degree include the following required courses plus three electives that account for a total of nine semester hours. ECON 6904 may be waived by the Graduate Coordinator for students with strong quantitative training, those students would then take an additional 3 semester hour elective.

COURSE	TITLE	S.H.
<b>Required Courses</b>		
ECON 6912	Microeconomic Theory	3
ECON 6922	Macroeconomic Theory	3
ECON 6939	The Economics of Financial Markets and Institutions	3

ECON 6976	Econometrics	3
ECON 6998	Research Seminar	3
FIN 6902	Financial Accounting and Finance for Decision Making	2
FIN 6912	Financial Statement Analysis	2
FIN 6923	Corporate Financial Management	2
FIN 6924	Securities Analysis	3
Select two electives		6
Total Semester Hours		30

Electives are 6900-level Economics courses, with the exception of ECON 6921 which will not count towards the degree. One elective may be either a 5800-level economics swing course or a graduate-level course taught outside the Department that has been approved by the graduate coordinator.

## Thesis Option

Students may write a thesis expanding on their project in the Research Seminar (ECON 6998) in place of one of the three hour electives. Students selecting the thesis option must earn a grade of B or A in the Research Seminar and submit a thesis proposal with the names of three faculty members who are willing to serve on a thesis committee to the department chair prior to registering for thesis credit hours (ECON 6999). The student must defend the thesis in an oral examination before a committee of three or more faculty members of the department. The thesis must be submitted according to the general requirements of the College of Graduate Studies.

## Learning Outcomes

The learning outcomes for the MA in economics are as follows:

1. The students will demonstrate how to measure, detrend, and analyze macroeconomic variables such as GDP and inflation.
2. The students will evaluate monetary and fiscal policy using various versions of the IS-LM model.
3. The students will demonstrate the importance of expectations in current macroeconomic theory.
4. The students will compare the basic theories and models of Neoclassical and New-Keynesian Economics.
5. The student will solve for utility-maximizing and cost-minimizing outcomes using calculus.
6. The student will mathematically model the behavior of firms in competitive markets and firms who are monopolies.
7. The student will calculate the welfare losses due to a lack of competition.
8. The student will explain how public goods and externalities result in market failure.
9. The student will summarize how taxes result in efficiency losses and what factors determine the size of the efficiency loss.
10. The student will use an econometric approach to model economic phenomenon, estimate the resulting model, and interpret the estimated regression coefficients.
11. The student will demonstrate how to conduct a literature search of professional economic journals using EconLit.

## Graduate Courses

### **ECON 5801 Economics of Industrial Organization 3 s.h.**

A systematic analysis of the structure, conduct, and performance of American industry. A quantitative analysis plus a comprehensive review of theoretical models of the market, firm behavior, and performance.

**Prereq.:** ECON 2610.

### **ECON 5806 History of Economic Thought 3 s.h.**

Designed to provide students with an understanding of the development of economic ideas to include: Mercantilism, Physiocrats, the English Classical School, Utilitarianism, early Social Thought, Karl Marx, the German Historical School, Institutionalists and the Keynesian School.

**Prereq.:** ECON 2630.

### **ECON 5809 Current Problems in Money, Banking, and Financial Markets 3 s.h.**

The financial market system, including money and capital markets. Current problems associated with trends in theory and practice. Theories of the interest rate and monetarism.

**Prereq.:** ECON 3701 or consent of instructor.

### **ECON 5811 International Trade 3 s.h.**

Theories of international trade and specialization; free trade vs. protectionism; tariff and non-tariff barriers to international trade; international balance of payments and its components; the role of multinational enterprises in contemporary trade pattern; regional economic integrations and world trade; U.S. commercial policies.

**Prereq.:** ECON 2630.

### **ECON 5812 International Finance 3 s.h.**

Theories of foreign exchange and capital movements, international payments, analysis of spot and forward foreign exchange markets, foreign exchange market arbitrage, speculation, and risk hedging. The Bretton Woods agreement and the contemporary international monetary system. The rise of international organizations and multinational enterprises in the international economy.

**Prereq.:** ECON 2630.

### **ECON 5822 Urban and Regional Economics 3 s.h.**

Economic analysis of the problems of urbanized areas and the causes of the growth or decline in economic activity in small-area economics. Topics include benefit-cost analysis, economic base analysis, input-output applications, and the theory of location and agglomeration.

**Prereq.:** ECON 2610.

### **ECON 5824 Applied Time Series Analysis of Economic and Business Data 3 s.h.**

An in-depth analysis of time series models and their applications to problems in economics and business. Emphasis on forecasting. Extensive use of standard computer programs.

**Prereq.:** ECON 2610 and either ECON 3790 or STAT 4817.

### **ECON 5831 Labor Markets and the Economics of Unions 3 s.h.**

Economic theory and analysis of labor as an input in the resource market; principles, labor problems, public policy; theories of the development of the labor movement; economic objectives of trade unions; problems in public control.

**Prereq.:** ECON 2610.

### **ECON 5843 Economics of Poverty, Transfers and Discrimination 3 s.h.**

Examines the measurement and causes of poverty, trends in the distribution of income, and antipoverty programs and their effectiveness. Discussions of theories of discrimination, difficulties in measuring the impact of discrimination, and policies designed to reduce discrimination.

**Prereq.:** ECON 2610.

### **ECON 5853 Applied Econometrics 3 s.h.**

The practice of econometrics with emphasis on model construction, estimation, and interpretation of results. Applications in the private and public sectors involve the use of computers and economic software.

**Prereq.:** ECON 2630 and ECON 3790.

### **ECON 5856 Topics in Quantitative Economics 3 s.h.**

Application of different tools of mathematical economics, computational economics, and econometrics in conjunction with economic theory to model economic problems of firms, consumers, financial institutions, and public sectors. Specific content of the course will vary with the instructor. May be repeated once with a different topic.

**Prereq.:** ECON 3790.

**ECON 5861 SAS Programming for Data Analysis 3 s.h.**

An introduction to SAS programming for data analytics. Topics include using SAS for data processing, manipulation, visualization, reporting, and statistical analysis. The objective is for students to develop statistical computing skills for problem solving and decision making.

**Prereq.:** ECON 3790 or STAT 2601 or STAT 3717 or STAT 3743.

**Cross-listed:** STAT 5811.

**ECON 6900 Statistical Problems 3 s.h.**

A survey of the fundamental statistical techniques used in business with special emphasis on interpreting the results generated by statistical software. Techniques covered: hypothesis tests of means and proportions, estimation, chi-square tests, analysis of variance, correlation, and regression. Not applicable toward the M.A. in economics.

**ECON 6904 Quantitative Methods for Economics 3 s.h.**

A course designed to provide graduate students in economics with an opportunity to acquire the necessary skills in using the quantitative methods that are required to complete graduate-level economic theory and econometrics courses successfully. The course introduces the basic concepts and procedures of differential and integral calculus that are used in economic analysis, as well as the fundamental probability and statistics which are needed in the study of econometrics.

**ECON 6912 Microeconomic Theory 3 s.h.**

Study of demand and supply, consumer theory, the theory of the firm, various market structures, and Pareto efficiency.

**ECON 6915 Health Policy 3 s.h.**

A theoretical and empirical analysis of the health care sector. Topics include the demand for health care and health insurance, the perverse incentives of health insurance, moral hazard, physician and hospital behavior, and the role of competitive markets in the delivery of health care. Special emphasis is placed on the analysis of public policy, including financing and regulating the health care industry.

**Prereq.:** admission into the MA in Economics or MA in Financial Economics programs or permission of instructor.

**ECON 6921 Economic Analysis of Markets and Industries 2 s.h.**

Participants 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, participants 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.

**ECON 6922 Macroeconomic Theory 3 s.h.**

Examines models used to determine the value of various aggregate economic variables, such as the price level, national income, employment, interest rates, and wage rates.

**ECON 6939 The Economics of Financial Markets and Institutions 3 s.h.**

Study of the institutions, instruments, and markets that facilitate the distribution of financial resources throughout the economy. The course discusses the money, capital, and commodity markets. Also, the topics of accessing default risk and hedging against market risk are discussed.

**Prereq.:** admission into the MA in Economics or MA in Financial Economics programs or permission of instructor.

**ECON 6940 Financial Economics 3 s.h.**

Study of various topics, including risk and the selection of the optimal monetary control tool, politics and monetary control, the financial firm as an optimizing institution, and portfolio theory.

**Prereq.:** ECON 6939 or permission of the instructor.

**ECON 6941 Monetary Economics 3 s.h.**

Study of the empirical analysis using multivariate time series methods, including the topics of distributed lag models, selection of the appropriate lag structures, causation versus correlation, and cointegration.

**Prereq.:** ECON 6922 or permission of the instructor.

**ECON 6945 Public Finance 3 s.h.**

Study of the role of the government in the economy. The topics covered will include expenditure analysis, theories of taxation, provision of public goods, fiscal federalism, and public choice theory.

**Prereq.:** ECON 6912.

**ECON 6946 State and Local Public Finance 3 s.h.**

Study of the special problems of financing subnational governments. Topics include the optimal level of local government spending, public choice through voting, public choice through migration, the combination of taxes used by state and local governments, the theory of tax incidence, the effect of intergovernmental grants, and expenditure patterns of local governments. Special attention will be given to local governmental grants and expenditure patterns of local governments, as well as local governments' role in financing education and transfer payments.

**Prereq.:** admission into the MA in Economics or MA in Financial Economics programs or permission of instructor.

**ECON 6952 Transfer Programs and Poverty 3 s.h.**

A study of poverty and the effectiveness of antipoverty programs. Topics include defining and measuring poverty, trends in the rate of poverty and the distribution of income, causes of poverty, models of discrimination, effectiveness of government training programs, transfer programs and their effect on labor supply, and the financial stability of the Social Security retirement program.

**Prereq.:** admission into the MA in Economics or MA in Financial Economics programs or permission of instructor.

**ECON 6955 Antitrust and Market Structure 3 s.h.**

Study of the pivotal court decisions that have determined the direction of antitrust law. Concentration is on the economic analysis of court decisions and the impact of the courts' decision on market structure. Topics covered include price fixing, mergers, monopolization, and exclusion practices.

**Prereq.:** admission into the MA in Economics or MA in Financial Economics programs or permission of instructor.

**ECON 6970 Economics Internship 3 s.h.**

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.:** ECON 6912 and ECON 6922.

**ECON 6976 Econometrics 3 s.h.**

Study of the fundamentals of econometric techniques that are useful for estimating causal economic relationships. The objectives include (1) analysis of the effects of exogenous factors on the variable whose behavior we seek to explain, (2) testing of hypotheses about new and existing economic theories, and (3) forecasting estimated economic relationships beyond the sample period for the purpose of planning and control. The course will focus on the practice of econometrics with extensive applications to a variety of real-world problems in many areas of economics.

**Prereq.:** ECON 6904.

**ECON 6981 International Finance 3 s.h.**

Study of the foreign exchange market; the business and economic consequences of changes in domestic and foreign banking; central banking; and financial market policies. The development of various exchange rate standards, foreign currency markets, and the Eurocurrency and Eurobond markets.

**Prereq.:** admission into the MA in Economics or MA in Financial Economics programs or permission of instructor.

**ECON 6985 International Trade and Development 3 s.h.**

Study of the determination of a country's exports and imports, the social welfare consequence of trade, free trade versus restricted trade, preferential trading agreements, and the current composition and direction of U.S. trade.

**Prereq.:** admission into the MA in Economics or MA in Financial Economics programs or permission of instructor.

**ECON 6988 Modeling in Financial Economics 3 s.h.**

A study of modeling and evaluation of derivatives and bonds and risk management using derivatives. Topics cover various models in asset evaluation, such as bond price models, the Black-Sholes model, diffusion processes, and risk management. Also listed as STAT 6988.

**Prereq.:** STAT 4843 or STAT 6943 or ECON 6976.

**ECON 6990 Special Topics in Economics 1-3 s.h.**

Special interest topics selected by the staff in the following areas: economic education, economic theory, and applied economics analysis. May be repeated for a maximum of six hours toward a graduate degree.

**ECON 6992 Data Analytics - Advanced SAS Programming 3 s.h.**

This course is designed to provide students training of advanced SAS programming for data analysis. Main topics include SQL, Macro language, Econometrics-related procedures, working with large data set, etc. Crosslisted with STAT 6912.

**Prereq.:** ECON 6976 or equivalent and either ECON 5861 or STAT 5811.

**ECON 6998 Research Seminar 3 s.h.**

Applied quantitative research techniques will be discussed. Students are required to undertake an original quantitative research project in a field of economics and write a paper summarizing their results. Course may be taken concurrently with ECON 6976. **Prereq.:** ECON 6912 and ECON 6922.

**ECON 6999 Master's Thesis 3 s.h.**

A research project under the supervision of a member of the department on the graduate faculty. The project typically extends the student's research in ECON 6998.

**Prereq.:** a grade of "A" or "B" in ECON 6998 and a thesis proposal accepted by departmental committee.

## Master of Arts in English

### Program Director

Dr. Lucas Hardy, Graduate Director  
240 DeBartolo Hall  
330-941-3420  
lhardy01@ysu.edu

### Program Description

The Master of Arts program in English offers courses in:

- literature research,
- history and theory;
- genre and figure studies;
- creative and professional writing;
- linguistics and composition theory;
- film; and
- the teaching of writing and literature.

Faculty members strive to offer students an understanding of the traditions of literary study and familiarity with the latest multicultural and interdisciplinary approaches. The M.A. in English prepares graduates to pursue opportunities in teaching, professional writing, and further graduate study.

Working closely with their advisors, students design individual programs to meet their interests and goals. Students are encouraged to explore a variety of approaches to the study of literature, language, and writing and to develop their abilities as readers, critics, writers, and teachers. The program requires 30 semester hours of coursework in English, during which students complete and present a thesis or portfolio of their representative work to a faculty review committee.

### Graduate Certificates

Graduate certificates in professional and technical writing, teaching of writing, literature for children and young adults, and teaching English to speakers of

other languages (TESOL) are available through the English Department. Please see the appropriate information in the Graduate Certificates section of this catalog.

### 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.

Students who anticipate graduate study beyond the M.A. are strongly advised to acquire basic reading competence in at least one foreign language.

### Admission Requirements

Students must have an undergraduate English major or other preparation judged satisfactory by the department and an grade point average in undergraduate study of at least 3.0 (on a 4.0 scale). Applicants for the M.A. are required to submit a brief (750-1000 words) statement of purpose outlining their reasons for wishing to obtain the M.A. in English and how that degree fits into their professional goals. Applicants are also required 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

**Rebecca A. Barnhouse**, Ph.D., Professor

Medieval literature; fiction writing; young adult literature

**Christopher Barzak**, M.F.A., Professor

Fiction writing; fiction; contemporary British and American literature

**Laura L. Beadling**, Ph.D., Associate Professor

Gender, race and sexuality in American film; Native American film and culture; comics studies; television studies; rhetoric and composition

**Jennifer Behney**, Ph.D., Associate Professor

Grammatical gender acquisition; facilitation and inhibition in spoken word recognition; eye-tracking and gender agreement marking; L2 syntactic priming; working memory, inhibition, and interaction; form-meaning connections in lexical access; and dialect/minority language preservation

**Terry Benton**, Ph.D., Assistant Professor

Children's literature

**Philip Sean Brady**, Ph.D., Professor

Modern Irish literature; creative writing; modern world literature

**Jeffrey M. Buchanan**, Ph.D., Chair, Professor

English education; composition; pedagogy

**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

**Julia M. Gergits**, Ph.D., Professor

Victorian literature; women's studies; technical writing; literature and the Other

**Jay L. Gordon**, Ph.D., Associate Professor



Rhetoric; technical and professional communication; document design; pedagogy of writing

**Stacy Graber**, Ph.D., Associate Professor  
Popular culture; pedagogy; critical theory; semiotics

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

**Steven Reese**, Ph.D., Professor  
Twentieth-century British literature; creative writing

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

**Linda J. Strom**, Ph.D., Associate Professor

## Degree Requirements

All master's degree students must complete 30 semester hours in English courses at the graduate level; exceptions must have prior approval of the English Department chair and the Director of Graduate Studies. All M.A. students must take at least one course in each of two areas:

- one theory or methods course (graduate assistants must take ENGL 6907 Teaching of Writing; ENGL 6989 Teaching Practicum may not fulfill this requirement);
- one language, discourse, or writing course.

Students may select the literature-based M.A. or the M.A. track in Professional Writing and Editing to complete their degree.

## 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:

- ENGL 6900 Methods of Literary Research, or
- ENGL 6901 Methods of Composition Research.

To complete their degree requirements, students in this option may either submit a thesis or a graduate portfolio.

Students in this option are encouraged, but not required, to create a focus area with their remaining courses. Possible focus areas include:

- literature,
- linguistics,
- professional writing and editing,
- composition and rhetoric,
- teaching English to speakers of other languages (TESOL), and
- literature for children and young adults.

Students who plan on pursuing a Ph.D. in literary studies are strongly encouraged to complete a broad selection of courses in British and American literature.

## M.A. in English, Professional and Technical Writing Track

To complete this option, students must complete 30 semester hours of credit in the following courses. Two of these courses must also satisfy the theory, language, discourse, or writing courses required above.

COURSE	TITLE	S.H.
<b>Required Course Courses</b>		
ENGL 6943	Technical Communication	3
ENGL 6944	Document Design and Production	3
ENGL 6945	Theory of Professional and Technical Communication	3
ENGL 6992	Professional Communication (special topics)	3
ENGL 6953	Publications Issues and Management	3
ENGL 6949	Professional and Technical Editing	3
Select three of the following:		9
ENGL 6901	Methods of Composition Research	
ENGL 6907	Teaching of Writing	
ENGL 6950	Sociolinguistics	
ENGL 6955	Advanced Linguistics	
ENGL 6958	English Grammar	
ENGL 6993	Discourse Theory	
ENGL 6998	Professional Writing Internship	3
or ENGL 6999	Thesis	
Total Semester Hours		30

## Thesis and Portfolio Options

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

The thesis option is designed especially for, but is not limited to, students planning to pursue a doctorate. Students choosing this option must select a committee consisting of a thesis director and two additional graduate faculty members. This committee must approve a thesis proposal before the student can register for thesis credit. Students must demonstrate through the 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. The student will present the portfolio to a faculty review committee no later than the eighth week of the semester in which s/he plans to graduate. Students in the Professional Writing and Editing track may count up to three semester hours of credit earned in their professional internship toward the 30 semester hour requirement.

## Learning Outcomes

English graduate students will demonstrate the ability to produce professional-quality research papers that could 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 field as scholars, teachers, editors, and/or 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 Technical Communication 3 s.h.**

In-depth discussion of audience, format, document design, and corporate structure. Focus on refining skills and providing theoretical support for practical applications.

**Prereq.:** ENGL 3743 Professional and Technical Communication and ENGL 4849 Professional and Technical Editing or ENGL 6949.

**ENGL 6944 Document Design and Production 3 s.h.**

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

**ENGL 6945 Theory of Professional and Technical Communication 3 s.h.**

Examines theory and research in professional and technical communication with emphasis on the application of theoretical concepts and empirical findings to practical problems in the field. Introduces students to theories and research methods through reading in current literature and through class research projects.

**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 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 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 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 Financial Economics

### Program Director

Dr. Ebenge Usip  
307 DeBartolo Hall  
(330) 941-1682  
eeusip@ysu.edu

### Program Description

The Master of Arts in financial economics program is designed to provide students with a background in economic theory and to teach students how to analyze financial markets. This program is intended to lead to professional employment in the financial services industry, including banking, insurance, and financial advising. Coursework in the program includes:

- coverage of micro- and macroeconomic theory,
- econometrics,
- financial markets,
- management of financial capital, and
- analysis of the valuation of stocks.

Electives allow students an opportunity to pursue additional topics such as international finance. Supplemented by upper-level courses in mathematics, the program can also help prepare students for doctoral study in finance, economics, or related fields.

### Combined Bachelors/Masters Program

Highly qualified undergraduate students can apply for admission into the combined "4+1" Bachelors/Masters program for the MA in Economics. See the description of the "4+1" program (<http://catalog.ysu.edu/undergraduate/colleges-programs/college-liberal-arts-social-sciences/department-economics/4-1-bachelors-masters-program>) in the undergraduate catalog.

### Admission Requirements

In addition to the College of Graduate Studies admission requirements, applicants must have completed at least one course in each of the following areas:

- principles of microeconomics,
- principles of macroeconomics,
- statistics, and
- calculus.

Students who do not meet the requirements may be admitted on a provisional basis. Students with provisional admission are required to take undergraduate coursework to fulfill the admission requirements. With the permission of the Graduate Coordinator they may also be allowed to simultaneously take a limited number of masters-level courses.

## Graduate Faculty

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

**Ou Hu**, Ph.D., Professor  
Financial markets; international finance; asset pricing

**Tomi P. Ovaska**, Ph.D., Professor  
Public finance; comparative economic systems; entrepreneurship;  
international trade; behavioral economics

**Joseph Palardy**, Ph.D., Professor  
Macroeconomics; time series econometrics

**Tod Porter**, Ph.D., Professor, Chair  
Labor markets; school finance; computer-aided instruction

**Albert J. Sumell**, Ph.D., Professor  
Urban, housing, and environmental economics

**Yogesh Uppal**, Ph.D., Professor  
Applied microeconomics; applied econometrics; public economics; political  
economy; development economics

**Yaqin Wang**, Ph.D., Professor  
Futures markets; behavioral economics

## Degree Requirements

Students must complete 30 semester hours of graduate credit with a grade point average of 3.0 or higher for the M.A. in financial economics. The requirements for the degree include the following required courses plus two electives that account for a total of six semester hours. Students who need to reinforce their quantitative skills will be asked to take ECON 6904, which does not count towards the 30 semester hours.

COURSE	TITLE	S.H.
<b>Required Courses</b>		
ECON 6912	Microeconomic Theory	3
ECON 6922	Macroeconomic Theory	3
ECON 6939	The Economics of Financial Markets and Institutions	3
ECON 6976	Econometrics	3
ECON 6998	Research Seminar	3
FIN 6902	Financial Accounting and Finance for Decision Making	2
FIN 6912	Financial Statement Analysis	2
FIN 6923	Corporate Financial Management	2
FIN 6924	Securities Analysis	3
<b>Electives</b>		
Select two 3 sh electives		6
Total Semester Hours		30

6900-level graduate courses in Economics or Finance can be used as electives (the one exception is ECON 6921, which does not count towards the degree). One elective may be either a 5800-level economics swing course or a graduate-

level course outside of finance or economics that has been approved by the graduate coordinator.

## Thesis Option

Students may write a thesis expanding on their project in the Research Seminar (ECON 6998) in place of one of the three hour electives. Students selecting the thesis option must earn a grade of B or A in the Research Seminar and submit a thesis proposal with the names of three faculty members who are willing to serve on a thesis committee to the department chair prior to registering for thesis credit hours (ECON 6999). The student must defend the thesis in an oral examination before a committee of three or more faculty members of the department. The thesis must be submitted according to the general requirements of the College of Graduate Studies.

## Learning Outcomes

1. The students will demonstrate how to measure, detrend, and analyze macroeconomic variables such as GDP and inflation.
2. The students will evaluate monetary and fiscal policy using various versions of the IS-LM model.
3. The students will demonstrate the importance of expectations in current macroeconomic theory.
4. The students will compare the basic theories and models of Neoclassical and New-Keynesian Economics.
5. The student will solve for utility-maximizing and cost-minimizing outcomes using calculus.
6. The student will mathematically model the behavior of firms in competitive markets and firms who are monopolies.
7. The student will calculate the welfare losses due to a lack of competition.
8. The student will use an econometric approach to model economic phenomenon, estimate the resulting model, and interpret the estimated regression coefficients.
9. The student will demonstrate how to conduct a literature search of professional economic journals using EconLit.
10. The student will demonstrate knowledge of the various financial markets, instruments, agents, functions, and intermediaries.
11. The student will demonstrate knowledge of hedging versus speculating, primary and secondary markets for mortgage loans, and markets for future and options contracts.
12. The student will demonstrate knowledge of the market interest rates swaps, and how to use financial instruments to hedge against interest risk.
13. The student will demonstrate how to use financial models to aid managers in making value maximizing choices.
14. The student will demonstrate an understanding of the allocative role and function of financial markets, securities, and corporate financial decisions in a market economy.
15. The student will demonstrate the importance of finance as a vital function within an organization that necessitates diligence and high ethical standards in application
16. The student will demonstrate knowledge of the link between theoretically sound financial techniques and value judgment.

## Graduate Courses

**ECON 5801 Economics of Industrial Organization 3 s.h.**

A systematic analysis of the structure, conduct, and performance of American industry. A quantitative analysis plus a comprehensive review of theoretical models of the market, firm behavior, and performance.

**Prereq.:** ECON 2610.

**ECON 5806 History of Economic Thought 3 s.h.**

Designed to provide students with an understanding of the development of economic ideas to include: Mercantilism, Physiocrats, the English Classical School, Utilitarianism, early Social Thought, Karl Marx, the German Historical School, Institutionalist and the Keynesian School.

**Prereq.:** ECON 2630.

**ECON 5809 Current Problems in Money, Banking, and Financial Markets 3 s.h.**

The financial market system, including money and capital markets. Current problems associated with trends in theory and practice. Theories of the interest rate and monetarism.

**Prereq.:** ECON 3701 or consent of instructor.

**ECON 5811 International Trade 3 s.h.**

Theories of international trade and specialization; free trade vs. protectionism; tariff and non-tariff barriers to international trade; international balance of payments and its components; the role of multinational enterprises in contemporary trade pattern; regional economic integrations and world trade; U.S. commercial policies.

**Prereq.:** ECON 2630.

**ECON 5812 International Finance 3 s.h.**

Theories of foreign exchange and capital movements, international payments, analysis of spot and forward foreign exchange markets, foreign exchange market arbitrage, speculation, and risk hedging. The Bretton Woods agreement and the contemporary international monetary system. The rise of international organizations and multinational enterprises in the international economy.

**Prereq.:** ECON 2630.

**ECON 5822 Urban and Regional Economics 3 s.h.**

Economic analysis of the problems of urbanized areas and the causes of the growth or decline in economic activity in small-area economics. Topics include benefit-cost analysis, economic base analysis, input-output applications, and the theory of location and agglomeration.

**Prereq.:** ECON 2610.

**ECON 5824 Applied Time Series Analysis of Economic and Business Data 3 s.h.**

An in-depth analysis of time series models and their applications to problems in economics and business. Emphasis on forecasting. Extensive use of standard computer programs.

**Prereq.:** ECON 2610 and either ECON 3790 or STAT 4817.

**ECON 5831 Labor Markets and the Economics of Unions 3 s.h.**

Economic theory and analysis of labor as an input in the resource market; principles, labor problems, public policy; theories of the development of the labor movement; economic objectives of trade unions; problems in public control.

**Prereq.:** ECON 2610.

**ECON 5843 Economics of Poverty, Transfers and Discrimination 3 s.h.**

Examines the measurement and causes of poverty, trends in the distribution of income, and antipoverty programs and their effectiveness. Discussions of theories of discrimination, difficulties in measuring the impact of discrimination, and policies designed to reduce discrimination.

**Prereq.:** ECON 2610.

**ECON 5853 Applied Econometrics 3 s.h.**

The practice of econometrics with emphasis on model construction, estimation, and interpretation of results. Applications in the private and public sectors involve the use of computers and economic software.

**Prereq.:** ECON 2630 and ECON 3790.

**ECON 5856 Topics in Quantitative Economics 3 s.h.**

Application of different tools of mathematical economics, computational economics, and econometrics in conjunction with economic theory to model economic problems of firms, consumers, financial institutions, and public sectors. Specific content of the course will vary with the instructor. May be repeated once with a different topic.

**Prereq.:** ECON 3790.

**ECON 5861 SAS Programming for Data Analysis 3 s.h.**

An introduction to SAS programming for data analytics. Topics include using SAS for data processing, manipulation, visualization, reporting, and statistical analysis. The objective is for students to develop statistical computing skills for problem solving and decision making.

**Prereq.:** ECON 3790 or STAT 2601 or STAT 3717 or STAT 3743.

**Cross-listed:** STAT 5811.

**ECON 6900 Statistical Problems 3 s.h.**

A survey of the fundamental statistical techniques used in business with special emphasis on interpreting the results generated by statistical software. Techniques covered: hypothesis tests of means and proportions, estimation, chi-square tests, analysis of variance, correlation, and regression. Not applicable toward the M.A. in economics.

**ECON 6904 Quantitative Methods for Economics 3 s.h.**

A course designed to provide graduate students in economics with an opportunity to acquire the necessary skills in using the quantitative methods that are required to complete graduate-level economic theory and econometrics courses successfully. The course introduces the basic concepts and procedures of differential and integral calculus that are used in economic analysis, as well as the fundamental probability and statistics which are needed in the study of econometrics.

**ECON 6912 Microeconomic Theory 3 s.h.**

Study of demand and supply, consumer theory, the theory of the firm, various market structures, and Pareto efficiency.

**ECON 6915 Health Policy 3 s.h.**

A theoretical and empirical analysis of the health care sector. Topics include the demand for health care and health insurance, the perverse incentives of health insurance, moral hazard, physician and hospital behavior, and the role of competitive markets in the delivery of health care. Special emphasis is placed on the analysis of public policy, including financing and regulating the health care industry.

**Prereq.:** admission into the MA in Economics or MA in Financial Economics programs or permission of instructor.

**ECON 6921 Economic Analysis of Markets and Industries 2 s.h.**

Participants 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, participants 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.

**ECON 6922 Macroeconomic Theory 3 s.h.**

Examines models used to determine the value of various aggregate economic variables, such as the price level, national income, employment, interest rates, and wage rates.

**ECON 6939 The Economics of Financial Markets and Institutions 3 s.h.**

Study of the institutions, instruments, and markets that facilitate the distribution of financial resources throughout the economy. The course discusses the money, capital, and commodity markets. Also, the topics of accessing default risk and hedging against market risk are discussed.

**Prereq.:** admission into the MA in Economics or MA in Financial Economics programs or permission of instructor.

**ECON 6940 Financial Economics 3 s.h.**

Study of various topics, including risk and the selection of the optimal monetary control tool, politics and monetary control, the financial firm as an optimizing institution, and portfolio theory.

**Prereq.:** ECON 6939 or permission of the instructor.

**ECON 6941 Monetary Economics 3 s.h.**

Study of the empirical analysis using multivariate time series methods, including the topics of distributed lag models, selection of the appropriate lag structures, causation versus correlation, and cointegration.

**Prereq.:** ECON 6922 or permission of the instructor.



**ECON 6945 Public Finance 3 s.h.**

Study of the role of the government in the economy. The topics covered will include expenditure analysis, theories of taxation, provision of public goods, fiscal federalism, and public choice theory.

**Prereq.:** ECON 6912.

**ECON 6946 State and Local Public Finance 3 s.h.**

Study of the special problems of financing subnational governments. Topics include the optimal level of local government spending, public choice through voting, public choice through migration, the combination of taxes used by state and local governments, the theory of tax incidence, the effect of intergovernmental grants, and expenditure patterns of local governments. Special attention will be given to local governmental grants and expenditure patterns of local governments, as well as local governments' role in financing education and transfer payments.

**Prereq.:** admission into the MA in Economics or MA in Financial Economics programs or permission of instructor.

**ECON 6952 Transfer Programs and Poverty 3 s.h.**

A study of poverty and the effectiveness of antipoverty programs. Topics include defining and measuring poverty, trends in the rate of poverty and the distribution of income, causes of poverty, models of discrimination, effectiveness of government training programs, transfer programs and their effect on labor supply, and the financial stability of the Social Security retirement program.

**Prereq.:** admission into the MA in Economics or MA in Financial Economics programs or permission of instructor.

**ECON 6955 Antitrust and Market Structure 3 s.h.**

Study of the pivotal court decisions that have determined the direction of antitrust law. Concentration is on the economic analysis of court decisions and the impact of the courts' decision on market structure. Topics covered include price fixing, mergers, monopolization, and exclusion practices.

**Prereq.:** admission into the MA in Economics or MA in Financial Economics programs or permission of instructor.

**ECON 6970 Economics Internship 3 s.h.**

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.:** ECON 6912 and ECON 6922.

**ECON 6976 Econometrics 3 s.h.**

Study of the fundamentals of econometric techniques that are useful for estimating causal economic relationships. The objectives include (1) analysis of the effects of exogenous factors on the variable whose behavior we seek to explain, (2) testing of hypotheses about new and existing economic theories, and (3) forecasting estimated economic relationships beyond the sample period for the purpose of planning and control. The course will focus on the practice of econometrics with extensive applications to a variety of real-world problems in many areas of economics.

**Prereq.:** ECON 6904.

**ECON 6981 International Finance 3 s.h.**

Study of the foreign exchange market; the business and economic consequences of changes in domestic and foreign banking; central banking; and financial market policies. The development of various exchange rate standards, foreign currency markets, and the Eurocurrency and Eurobond markets.

**Prereq.:** admission into the MA in Economics or MA in Financial Economics programs or permission of instructor.

**ECON 6985 International Trade and Development 3 s.h.**

Study of the determination of a country's exports and imports, the social welfare consequence of trade, free trade versus restricted trade, preferential trading agreements, and the current composition and direction of U.S. trade.

**Prereq.:** admission into the MA in Economics or MA in Financial Economics programs or permission of instructor.

**ECON 6988 Modeling in Financial Economics 3 s.h.**

A study of modeling and evaluation of derivatives and bonds and risk management using derivatives. Topics cover various models in asset evaluation, such as bond price models, the Black-Sholes model, diffusion processes, and risk management. Also listed as STAT 6988.

**Prereq.:** STAT 4843 or STAT 6943 or ECON 6976.

**ECON 6990 Special Topics in Economics 1-3 s.h.**

Special interest topics selected by the staff in the following areas: economic education, economic theory, and applied economics analysis. May be repeated for a maximum of six hours toward a graduate degree.

**ECON 6992 Data Analytics - Advanced SAS Programming 3 s.h.**

This course is designed to provide students training of advanced SAS programming for data analysis. Main topics include SQL, Macro language, Econometrics-related procedures, working with large data set, etc. Crosslisted with STAT 6912.

**Prereq.:** ECON 6976 or equivalent and either ECON 5861 or STAT 5811.

**ECON 6998 Research Seminar 3 s.h.**

Applied quantitative research techniques will be discussed. Students are required to undertake an original quantitative research project in a field of economics and write a paper summarizing their results. Course may be taken concurrently with ECON 6976. **Prereq.:** ECON 6912 and ECON 6922.

**ECON 6999 Master's Thesis 3 s.h.**

A research project under the supervision of a member of the department on the graduate faculty. The project typically extends the student's research in ECON 6998.

**Prereq.:** a grade of "A" or "B" in ECON 6998 and a thesis proposal accepted by departmental committee.

**FIN 6900 Financial Accounting and Finance for Decision Making 4 s.h.**

A survey of the fundamental concepts of financial accounting employed by general managers. Additionally, a survey of the concepts, principles, and practices of financial management used by general managers and the links between the two types of information. Permit required.

**FIN 6902 Financial Accounting and Finance for Decision Making 1-2 s.h.**

Participants be able to utilize foundational concepts of accounting and finance so they are able to use financial statements to determine the condition of a business. Further, participants will learn how to utilize key financial ratios, which capture key elements of a firm's performance, to be better positioned to make more informed decisions.

**Prereq.:** Graduate standing.

**FIN 6910 Business Internship 1-3 s.h.**

Provides graduate students the opportunity to relate theory to practice through on-the-job work experience with a participating organization. The internship will serve as an elective MBA course.

**Prereq.:** Completion of level I MBA coursework and six semester hours of level II MBA coursework.

**FIN 6912 Financial Statement Analysis 2 s.h.**

Financial numbers can provide great insight to help guide and inform decisions. Participants will learn to use concepts and techniques of financial analysis to analyze reports and mini-cases of real companies to determine their financial health. Major topics include the analysis of the income statement, cash flow statement, balance sheet, and detailed examination of various financial ratios and their significance.

**Prereq.:** Graduate standing and FIN 6902.

**FIN 6923 Corporate Financial Management 2 s.h.**

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.



**FIN 6924 Securities Analysis 3 s.h.**

The major emphasis will be an in-depth, fundamental analysis of the investment merits of the common stock of a firm. This study will be accomplished by applying the appropriate analytical principles and valuation techniques to the firm's financial statements. A research paper will be required.  
**Prereq.:** FIN 6923.

**FIN 6939 Multinational Accounting and Finance 3 s.h.**

A cross-functional examination of selected topics in international accounting and finance with emphasis on developing research and problem-solving skills. Cases will be presented that teach the strategy and tactics of multinational corporate reporting and financial management.  
**Prereq.:** FIN 6923.

**FIN 6945 Business Valuation 3 s.h.**

A study of business valuation techniques currently used in valuing publicly traded and private equity.  
**Prereq.:** "C" or better in FIN 3720 or FIN 6900.

**FIN 6953 Advanced Financial Analysis 3 s.h.**

Applications of financial analysis to business consulting. Includes case studies and practical implementation strategies.  
**Prereq.:** FIN 6923.

**FIN 6968 Special Topics in Finance 1-3 s.h.**

Topics may vary from semester to semester and will be announced with prerequisites and hours. May be repeated.

**FIN 6970 Seminar in Finance 3 s.h.**

Specific topics selected by the staff from timely and controversial work published in the field.

**Prereq.:** All core courses, plus at least six hours (6900-level) in the finance concentration, or permission of instructor.

**FIN 6996 Research Problems 1-4 s.h.**

Special research project under the supervision of a graduate faculty member. Credit will be determined in each case in light of the nature and extent of the project.

**Prereq.:** Fifteen hours of level II MBA coursework or permission of MBA director.

## Master of Arts in Gerontology

### Program Director

Daniel J. Van Dussen, Ph.D.  
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 42 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

**Tiffany F. Hughes**, Ph.D., Assistant Professor

Cognitive impairment and dementia; fall prevention; health promotion

**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., Associate 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.
<b>Core Courses</b>		
SOC 6905	Social Gerontology	3
GERO 6915	Service Delivery Aging Policy	3
PSYC 6957	Advanced Adult Development and Aging	3
GERO 6906	Perspectives in Gerontology	3
GERO 6960	Epidemiology of Aging	3
GERO 6999	Research Methods	3
GERO/NURS 6998	Anatomy and Physiology of Aging	3
GERO 7090	Field Practicum	3
GERO 7094	Selected Topics	3
<b>Thesis</b>		
GERO 7099	Thesis	3
<b>Elective</b>		
Select 6 s.h. from the following:		6
PSYC 6959	Behavior Change Interventions and Aging	
GERO 7001	Long-Term Care	
SCWK 7006	Social Work in Aging	
GERO 7090	Field Practicum	
GERO 7094	Selected Topics	
Total Semester Hours		36

### Non-Thesis Option

COURSE	TITLE	S.H.
<b>Core Courses</b>		
SOC 6905	Social Gerontology	3
GERO 6915	Service Delivery Aging Policy	3
PSYC 6957	Advanced Adult Development and Aging	3
GERO 6906	Perspectives in Gerontology	3
GERO 6960	Epidemiology of Aging	3
GERO 6999	Research Methods	3
GERO/NURS 6998	Anatomy and Physiology of Aging	3
GERO 7090	Field Practicum	3
GERO 7094	Selected Topics	3
<b>Non-Thesis Track</b>		
Field Practicum		3
<b>Elective</b>		
Select 6 s.h. from the following:		6

PSYC 6959	Behavior Change Interventions and Aging
GERO 7001	Long-Term Care
SCWK 7006	Social Work in Aging
GERO 7090	Field Practicum
GERO 7094	Selected Topics
Total Semester Hours	
36	

## Graduate Courses

### GERO 6906 Perspectives in Gerontology 3 s.h.

Focus on the major theoretical perspectives of aging and aging related research with a focus on health. Theories from gerontology, epidemiology, sociology, and psychology will be covered.

### GERO 6915 Service Delivery Aging Policy 3 s.h.

An interdisciplinary analysis of services for older adults including an examination of major policies, programs, and trends in aging.

### GERO 6960 Epidemiology of Aging 3 s.h.

Integration and application of epidemiologic theories; major conceptual issues regarding epidemiology and aging; and contemporary interdisciplinary concepts and research. Primary focus will be on the disease distribution and leading causes of death among our aging population.

### GERO 6998 Anatomy and Physiology of Aging 3 s.h.

Using a systems approach, this course will examine the anatomical and physiological changes that occur with aging. It will discuss age-related disorders and evaluate the impact of these changes on activities and daily function.

### GERO 6999 Research Methods 3 s.h.

This course serves as an introduction to major methodological issues and basic statistics in the social-scientific study of gerontology. Major topics include developmental perspective and conceptualization of change, basic developmental research design, conceptualization of research problems, research design, measurement, and data analysis. This course should enable students to formulate research questions, design studies, and determine measurement devices and methods of analysis from a developmental perspective.

### GERO 7001 Long-Term Care 3 s.h.

This course will introduce students to the following topics: who needs long term care; population distribution of long-term care and its current trends; long-term care industry; human medicine and long-term care; social structures and social inequalities in long-term care; culture components of long-term care; family care and social care; government, laws, and social policies of long-term care; and long-term care in a global perspective.

**Prereq.:** GERO 6960.

### GERO 7090 Field Practicum 1-9 s.h.

Students will complete a 200-hour placement in an aging-related workplace. Variable credit 1-6 s.h. May be repeated for up to 9 s.h.

### GERO 7094 Selected Topics 1-3 s.h.

An examination of contemporary topics in the field of gerontology. Examples of subject areas that may be covered: Nutrition, Pharmacology, Legal, etc. variable credit 1-3 hours may be repeated for up to 6 credit hours.

### GERO 7094D Selected Topics Individual Research 1-3 s.h.

An examination of contemporary topics in the field of gerontology. Examples of subject areas that may be covered: Nutrition, Pharmacology, Legal, etc. variable credit 1-3 hours may be repeated for up to 6 credit hours.

### GERO 7099 Thesis 1-3 s.h.

A substantive research project with approval of a committee chair and committee. Variable credit 1-3 s.h. May be repeated for up to 6 s.h.

## Master of Arts in History

### Acting Program Director

Dr. Daniel Ayana

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

## Program Description

The Department of History offers a graduate program leading to the Master of Arts degree. Its curriculum combines American, European, and Transnational/Global 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 all fields of history, 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. Hold a bachelor's degree from an accredited college or university
2. Have earned an undergraduate cumulative grade-point average of at least 2.75 on a 4.0 scale
3. Have a minimum of 16 credit hours of study in the field of history
4. Have submitted a score on the Graduate Record Examination
5. Have submitted a satisfactory academic writing assignment.
6. The above will be compiled and a score of at least 350 points must be achieved from the following calculation:  
Undergraduate GPA multiplied by 100, plus *percentile scores* from the verbal and written-essay sections of the GRE.  
Thus, a student with an undergraduate GPA of 3.25, a verbal GRE at 50<sup>th</sup> percentile, and written essay at 35<sup>th</sup> percentile would score 325+50+35=410.  
(The score for the GRE quantitative section will not be assessed.)

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, Chair  
Nineteenth- and twentieth-century Russian history; environmental history

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

**Donna M. DeBlasio**, Ph.D., Professor  
Twentieth-century US history; applied history; oral history

**Jacob Labendz**, Ph.D., Assistant Professor  
Jewish history; European history; Holocaust and genocide studies; nationalism, antisemitism, and racism; Communism and the Cold War; governance and authoritarianism; diaspora and migration; politics and culture of food; film and memory studies

**Thomas E. Leary**, Ph.D., Associate Professor  
Historic preservation; labor and industrial history

**Martha Pallante**, Ph.D., Professor

Early American studies; material culture; pedagogy

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

**Fred W. Viehe**, Ph.D., Professor  
History of the NEOEA

## Degree Requirements

The Department of History offers three tracks to candidates for a Master of Arts degree in history.

1. Track I is designed primarily for students who wish to continue studies toward a doctorate.
2. Track II is designed primarily to meet the needs and improve the effectiveness of secondary teachers.
3. Track 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.

### Track I (Historic Preservation)

- A total of 30 semester hours of graduate credit including thesis (six semester hours)
- Completion of HIST 6900 Introduction to Historical Research and HIST 6901 Historiography
- A required thesis
- Successful completion of general written and oral examinations

Students working in American or British history will not, in most instances, be required to pass a foreign language examination. In areas where a foreign language is essential for research, the student will have to meet the requirement set by the department, which will include reading knowledge only (no speaking required).

Before any student under option I is allowed to take the written and oral examinations, the advisor will designate to the chair of the Graduate Committee of the Department of History which foreign language, if any, the student is required to know and how this requirement has to be met.

Students under option I are reminded that the Department of History expects that the thesis shall display a capacity for research in a variety of historical sources and the ability to interpret factual information and shall constitute a properly documented report of the completed research.

### Track II (Museum Studies)

- A total of 33 semester hours of graduate credit
- Completion of HIST 6900 Introduction to Historical Research and HIST 6901 Historiography
- Two satisfactory (B or better) graduate seminar papers submitted to two different instructors. The papers will be deposited with the graduate program director to remain permanently on file. The overall course grade for each seminar must also be 'B' or better.
- Successful completion of general written and oral examinations
- Foreign language examination is not required

### Track III (Certificate in Applied History)

The M.A. in history with certificate in applied history is designed both to give students a grounding in American history and historical research at the graduate level and to introduce them to ideas and techniques useful in applied history of the built environment. Students earning the certificate may find work

with state or local preservation groups, museums, or government agencies. Students choose from among three possible tracks and then complete an additional 18 semester hours as described below. Students completing the appropriate courses may also earn the certificate only, without the M.A. degree, if they so wish.

COURSE	TITLE	S.H.
<b>Tracks</b>		
Complete one of three tracks.		18
<b>Track I: Historic Preservation</b>		
HIST 5806	American Architectural History 1	
HIST 5807	American Architectural History 2	
HIST 5810	Conservation of the Historic Built Environment	
HIST 6942	Applied History	
HIST 6943	Practicum in Applied History	
HIST 6944	Applied History Internship	
<b>Track II: Museum Studies</b>		
HIST 6941	American Material Culture	
HIST 6942	Applied History	
HIST 6943	Practicum in Applied History	
HIST 6944	Applied History Internship	
HIST 6955	Museum Curation and Interpretation 1	
HIST 6956	Museum Curation and Interpretation 2	
<b>Track III: Applied History Sequence</b>		
HIST 5806	American Architectural History 1	
HIST 6940	Oral History	
HIST 6941	American Material Culture	
HIST 6942	Applied History	
HIST 6944	Applied History Internship	
HIST 6946	Historical Editing	
Select at least one course from one of the tracks listed above that is not the student's primary track.		3
HIST 6900	Introduction to Historical Research	3
HIST 6901	Historiography	3
Complete at least one seminar outside of applied history.		3
Complete at least one readings course.		3
Complete two satisfactory (B or better) graduate papers submitted to two different instructors. One shall be from a history seminar and must be a research paper using primary sources. The other shall be based upon a paper begun in an applied history course, expanded through additional research and reading as directed by the instructor. The papers will be deposited with the graduate program director to remain permanently on file.		
Successful completion of general written and oral examinations		
Foreign language examination is not required.		
<b>Total Semester Hours</b>		<b>33</b>

## Learning Outcomes

1. Students will demonstrate the skills necessary for the historian to analyze information and report findings effectively, by recognizing the difference between primary and secondary resources and being able to critically read and analyze their content; by effectively communicating in written and oral media; and by exhibiting satisfactory critical-thinking and synthesis skills.
2. Students will demonstrate comprehension of the basic concepts that guide the historian's work, by understanding: the concepts of historiography and that historical interpretation is not fixed but changes over time; the significance of chronologies and the impact of cause and effect; and the importance and impact of cultural diversity on the past and its relevance in the present.

3. Students will demonstrate the ability to 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.

### **HIST 5807 American Architectural History 2 3 s.h.**

Development of vernacular, folk, and industrial architecture in the United States. Focus is on local variants with emphasis on 20th Century specimens. Field trips will view representative building types, especially housing.

**Prereq.:** HIST 5806.

### **HIST 5810 Conservation of the Historic Built Environment 3 s.h.**

The theory and practice of preserving and rehabilitating all aspects of the historic built environment. Provides broad exposure through field experience.

**Prereq.:** HIST 3715.

### **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 European Literature 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 6923 Research Seminar in 17th-Century Europe 3 s.h.**

Dutch Commercial Enterprise, the France of Louis XIV, Austria and the Empire, emergence of Brandenburg-Prussia, rise of modern science, the Age of Reason, and the development of the Baroque in arts and literature.

### **HIST 6924 Research Seminar in 18th-Century Europe 3 s.h.**

Selected areas of the Enlightenment, Old Regime, and the French Revolution. May be repeated with permission of instructor.

### **HIST 6925 Research Seminar in 19th-Century Europe 3 s.h.**

The Napoleonic and Post-Napoleonic Era and the rise of nationalism in Europe. May be repeated with permission of instructor.

### **HIST 6926 Research Seminar in 20th-Century Europe 3 s.h.**

Investigation of the causes of the great world wars, the rise of totalitarianism, and the Cold War. May be repeated with permission of instructor.

### **HIST 6927 Research Seminar in Russian History 3 s.h.**

Selected problems of Russian history. 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 6929 Research Seminar in English History 3 s.h.**

An examination of selected problems in the political, social, economic, and intellectual history of England. 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 6932 Research Seminar in Middle Eastern History 3 s.h.**

This course will deal with topics from the ancient Near East down to the contemporary clash of nationalisms in the Middle East. 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 6935 Research Seminar in African History 3 s.h.**

Selected problems in the political, social, economic, and intellectual history of Africa. 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 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 1-3 s.h.**

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

**HIST 6951A Special Topics in History History of Venice 1-3 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 6955 Museum Curation and Interpretation 1 3 s.h.**

An introduction to curatorial and interpretative work in a museum setting. Students will learn how to acquire and catalog objects and other materials; plan, research, and write an exhibit; and select objects and images for an exhibit.

**Prereq.:** HIST 6942.

**HIST 6956 Museum Curation and Interpretation 2 3 s.h.**

The exhibit planning begun in HIST 6955 will continue in this course, where the exhibit will actually be prepared and installed.

**Prereq.:** HIST 6955 and permission of the instructor.

**HIST 6957 Special Topics in Applied History 3 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.

## Master of Arts in Professional Communication

**Program Director**

Rebecca Curnalia, Ph.D.,  
2017 Bliss Hall  
(330) 475-9295  
rncurnalia@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.

Graduates will:

- understand how theory guides practice in professional communication;
- write effectively for multiple audiences using current technologies;

- develop strategies for effective organizational marketing;
- acquire advanced analytical and research skills appropriate to organizations;
- gain effectiveness in face-to-face and computer mediated interpersonal relationships; and
- appreciate ethical communication choices necessary for today's professionals.

### 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 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

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

### Faculty Research Interests

#### Communication Studies

**Shelley Blundell**, Ph.D., Assistant Professor

Information literacy needs assessment and instruction for academically at-risk groups; needs assessment and instruction for developmental undergraduate students; media framing of sexual assault and societal impacts; accessibility and universal design in online instruction and information resources; archival literacy; (social) media literacy and metaliteracy development in undergraduate students

**Rebecca M. L. Curnalia**, Ph.D., Associate 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. Earnhardt**, Ph.D., Professor, Chair

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

**Julia M. Gergits**, Ph.D., Professor

Victorian literature; women's studies; technical writing; literature and the Other

**Jay L. Gordon**, Ph.D., Associate Professor

Rhetoric; technical and professional communication; document design; pedagogy of writing

#### Marketing

**Kendra Fowler**, Ph.D., Associate Professor

Services marketing; retailing



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

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

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

**Emre Ulusoy**, Ph.D., Associate Professor  
Contemporary consumption; consumer sociology

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

The Master of Arts in Professional Communication will draw on the coursework and strengths of three concentration areas:

- communication,
- professional writing and editing (in English), and
- marketing.

Students will take courses according to the following plan:

## Thesis Option

COURSE	TITLE	S.H.
<b>Core Courses</b>		
CMST 6900	Introduction to Graduate Study	1
CMST 6957	Organizational Communication Research	3
CMST 6980	Applied Research Methods	3
CMST 6990	Measurement and Analysis	3
ENGL 6943	Technical Communication	3
ENGL 6944	Document Design and Production	3
MKTG 6943	Consumer & Product Management	2
MKTG 6975	Applied Marketing Strategy	2
MBA 6933	Business Ethics & Social Responsibility	1
<b>Thesis Option</b>		
Elective Courses		
Select a total of two, 3-credit courses from at least two of the three concentration areas		6
CMST 6970	Internship	3
CMST 6995	Thesis	6
Total Semester Hours		36

## Non-Thesis Option

COURSE	TITLE	S.H.
<b>Core Courses</b>		
CMST 6900	Introduction to Graduate Study	1
CMST 6957	Organizational Communication Research	3
CMST 6980	Applied Research Methods	3
CMST 6990	Measurement and Analysis	3
ENGL 6943	Technical Communication	3
ENGL 6944	Document Design and Production	3
MKTG 6943	Consumer & Product Management	2
MKTG 6975	Applied Marketing Strategy	2
MBA 6933	Business Ethics & Social Responsibility	1
<b>Non-Thesis Option</b>		
Elective Courses		

Select a total of three, 3-credit courses from at least two of the three concentration areas		9
CMST 6970	Internship	3
CMST 6994	Capstone	3
Total Semester Hours		36

## Learning Outcomes

1. Understand the communication discipline, our relationship to other disciplines, debates and differences, and your own specialization in the field.
2. Apply, critique, and differentiate between Communication theories, perspectives, principles, concepts, and approaches to studying communication.
3. Engage in Communication scholarship using the research traditions of the discipline with results that contribute to scholarly and professional conversations.
4. Create messages appropriate to the audience, purpose, and context, and reflect on the effectiveness of those messages.
5. Articulate personal beliefs about abilities to accomplish communication goals and evaluate strengths and weaknesses in achieving those goals.
6. Identify, explain, and apply ethical communication principles and practices.

## 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 mediation and arbitration.

**Prereq.:** CMST 2600.

### CMST 5860 Persuasion and New Media 3 s.h.

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

**Prereq.:** CMST 2600 and CMST 3700 or graduate status.

### CMST 5898 Seminar 3 s.h.

A cooperative exploration of topics in communication studies. May be repeated up to 6 s.h.

**Prereq.:** CMST 2600.

### CMST 5898M Seminar Global Seminar France 3 s.h.

A cooperative exploration of topics in communication studies. May be repeated up to 6 s.h.

**Prereq.:** CMST 2600.

### CMST 5898N Seminar Communication and Leadership 3 s.h.

A cooperative exploration of topics in communication studies. May be repeated up to 6 s.h.

**Prereq.:** CMST 2600.

### CMST 6900 Introduction to Graduate Study 1 s.h.

Orientation to teaching, learning, and research in the communication discipline for new graduate students.

### CMST 6945 Communication for the Classroom Teacher 3 s.h.

The study of communication theory and practice appropriate for the prospective classroom teacher. Theories and application exercises focus on interpersonal communication, group communication, and classroom speaking.

### CMST 6950 Computer Mediated Communication Research 3 s.h.

Theory, research, and application of CMC including examination of computer communication theories and relevant research methodologies, web design theory and critiques, blogging, podcasting, e-mailing, social media, multimedia storytelling. Design, implementation, and evaluation of CMC.

**CMST 6953 Group Dynamics: Theory and Research 3 s.h.**

Theory and research of group processes, critical thinking and creativity strategies, theory of group leadership and teamwork, conflict management and mediation, advanced group decision-making and problem solving, motivational strategies.

**CMST 6957 Organizational Communication Research 3 s.h.**

Applies theories of organizational communication to a chosen organization. Culminates with report and presentation.

**CMST 6970 Internship 3 s.h.**

Communication-related work in a non-academic professional setting.

**Prereq.:** Completion of the MA core courses.

**CMST 6980 Applied Research Methods 3 s.h.**

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

**CMST 6990 Measurement and Analysis 3 s.h.**

Research processes using social scientific, quantitative methodologies and practical experience in conducting research. Essential skill development in research design, measurement, data collection and data analysis.

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

Individual study and practical application of communication research 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 1-6 s.h.**

Research study on an applied communication topic. Oral presentation required. Total of 6 s.h. required for the MA thesis option. For thesis option students only. Non-thesis option students should take CMST 6994: Capstone.

**Prereq.:** Completion of the MA core courses.

## Master of Athletic Training

### Program Director

Jessica Wallace, PhD, AT, ATC  
307H Beeghly Center  
(330) 941-2577  
jwallace02@ysu.edu (eepisip@ysu.edu)

### Program Description

The Master of Athletic Training (MAT) degree is offered through the Bitonte College of Health and Human Services. The professional preparation coursework in this program encompass the professional domains of athletic training. The overall objectives of the YSU Athletic Training Education Program are to instruct, evaluate, and provide learning-over-time for students in the following professional domains:

- 1. Injury/Illness Prevention and Wellness Protection:** Students 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.
- 2. Clinical Evaluation and Diagnosis:** Students 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.
- 3. Immediate and Emergency Care:** Students 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.

- 4. Treatment and Rehabilitation:** Students 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. Organizational and Professional Health and Well-being:** Students 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

The MAT Program at YSU prepares students for entry-level athletic training practice across health care settings involving people of all ages. The program is two years with enrollment in five consecutive semesters either with one year at the undergraduate level and one year at the graduate level (accelerated track program) or both years at the graduate level (two-year Graduate School option).

YSU AT students are educated in cognitive and psychomotor skills related to recognition, treatment, and rehabilitation of injuries and illnesses involving the physically active, as well as risk management, health care administration, pharmacology, diagnostic imaging, and medical ethics and legal issues. In addition to the coursework, students are required to complete a minimum number of clinical education hours in a variety of settings.

## Admission Requirements

- Bachelor degree from an accredited institution
- 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":
  - Sports First Aid & Injury Prevention, 3 s.h.
  - Human Anatomy & Physiology I, 4 s.h.
  - Human Anatomy & Physiology II, 4 s.h.
  - General Biology I and Lab, 4 s.h.
  - General Chemistry and Lab, 4 s.h.
  - Physics and Lab, 4 s.h.
  - Kinesiology or Biomechanics, 3 s.h.
  - Exercise Physiology, 3 s.h.
  - General Psychology, 3 s.h.
  - Normal Nutrition, 3 s.h.
  - Statistics, 3 s.h.
- Apply by February 15<sup>th</sup>, - Apply online! (<http://cms.ysu.edu/college-graduate-studies/domestic-admissions>)
  - Athletic Training Application Form
  - Three Applicant Recommendation Forms (one must be from a faculty member)
  - 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

## Graduate Faculty

**Sara Michaliszyn**, Ph.D., Associate Professor, Chair  
Obesity; diabetes; pregnancy

**Jennifer Pintar**, Ph.D., Professor

Children with autism and the potential of exercise to reduce stereotypical behaviors; use of strength training to decrease low back pain and improve abdominal strength

**Jessica Wallace**, Ph.D., Assistant Professor

Sport-related concussion; concussion and reporting behaviors in urban communities with high school aged athletes; return-to-learn strategies at school following a concussion; issues of access to health care for concussion injuries in lower SES communities

#### Year 1

Fall		S.H.
MAT 6900	Basic Athletic Training Laboratory	1
MAT 6915	Evaluation and Management of Lower Extremity Injuries	4
MAT 6910	Clinical Practicum 1	4
MAT 5865	Functional Human Gross Anatomy	4
Semester Hours		13
Spring		
MAT 6920	Therapeutic Modalities	4
MAT 6925	Evaluation and Management of Upper Extremity Injuries	4
MAT 6930	Clinical Practicum 2	4
MAT 6935	Athletic Training Organization and Administration	3
Semester Hours		15
Summer		
MAT 6905	Psychosocial Aspects of Athletic Injuries	2
MAT 6950	Evidence-Based Practice/Research	3
MAT 6965	Advanced Perspectives	2
Semester Hours		7
Year 2		
Fall		
MAT 6940	Therapeutic Exercise	4
MAT 6945	General Medical Conditions	3
MAT 6960	Clinical Practicum 3	4
MAT 6985	Capstone Project 1	2
Semester Hours		13
Spring		
MAT 6970	Pharmacology	3
MAT 6975	Advanced Seminar	3
MAT 6980	Clinical Practicum 4	4
MAT 6990	Capstone Project 2	2
Semester Hours		12
Total Semester Hours		60

## Learning Outcomes

1. 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.
2. 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.
3. 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.

4. 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 5865 Functional Human Gross Anatomy 4 s.h.

The primary tool for learning gross anatomy is the human body. The laboratory dissections will present a regional approach (e.g., arm region, forearm region, etc.). General introductory and systemic anatomy topics (e.g., circulatory system, nervous system, etc.) will also be presented to help the student integrate the regional focus of the course into a broader anatomical perspective. The introductory section of the textbook is a good source of general information on systemic anatomy. Students are advised to read these chapters as early in the semester as possible, and to refer back to it as systemic anatomy topics are covered in lecture.

**Prereq.:** restricted to MAT students, instructor approval.

### MAT 5865L Functional Human Gross Anatomy Lab 0 s.h.

Functional Human Gross Anatomy Lab.

### 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 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 6910 Clinical Practicum 1 4 s.h.

Introduction to basic clinical experience working in a CAATE approved setting.

**Prereq.:** Admitted to the program.

### MAT 6915 Evaluation and Management of Lower Extremity Injuries 4 s.h.

The primary focus is to present a systematic process for accurately evaluating lower extremity musculoskeletal injuries and illnesses commonly seen in the physically active population. This course focuses on the athletic training competencies and proficiencies associated with lower extremity injury assessment and evaluation, risk management and injury prevention, and the acute care of injuries and illnesses.

**Prereq.:** Admitted to the program.

### 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 and Management of Upper Extremity Injuries 4 s.h.

This course is designed to continue with the development of the injury evaluation process, injury mechanisms associated with common sports injuries, and increased recognition of pathologies associated with a physically active population. Instruction and experience are directed toward the athletic training and competencies and proficiencies associated with the upper extremity, hand, and neck recognition, assessment, and evaluation, risk management and injury prevention and implications for acute care.

**Prereq.:** MAT 6915.

**MAT 6930 Clinical Practicum 2 4 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 experience providing informal learning and practice and application of clinical proficiencies in a clinical environment under the supervision of an approved instructor.

**Prereq.:** MAT 6910.

**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 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 6925.

**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 6925.

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

This course will introduce the research process in athletic training. Coursework will address the conception and methodological procedures of designing and pursuing research. The importance of pursuing quality research will be stressed and the procedures necessary to complete this process will be presented. Students will develop skills and a knowledge base that will aid them while conducting and critically reviewing research.

**Prereq.:** MAT 6930.

**MAT 6960 Clinical Practicum 3 4 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 6965 Advanced Perspectives 2 s.h.**

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**Prereq.:** MAT 6945.

**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 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 6980 Clinical Practicum 4 4 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 entry-level 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 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.

## Master of Business Administration

### Program Director

Dr. Patrick J. Bateman  
3355 Williamson Hall  
(330) 941-3524  
pjbateman@ysu.edu

### M.B.A. Coordinator

Monique Bradford  
1120 Williamson Hall  
(330) 941-3069  
mrbradford@ysu.edu

### Program Description

The Master of Business Administration program is designed primarily to prepare individuals for increasing levels of managerial responsibilities and executive positions. The program provides qualified individuals with a working-knowledge of accounting, finance, management, and marketing, as well as their interrelationships and applications. Through immersion in real-world problems and leadership practice, individuals develop the skills and confidence to face challenges in any functional area. M.B.A. graduates are educated to be capable of identifying complex problems, conducting critical analyses, and making informed and ethical decisions in the dynamic global environment.

### 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 1200 business schools in the United States have earned this prestigious accreditation.

### Admission Requirements

In addition to the minimum requirements for admission to the YSU College of Graduate Studies, regular admission to the MBA program is based on a determination of the applicant's readiness. This determination incorporates applicant's:

1. years of relevant, full-time, managerial and/or professional work experience<sup>1</sup>,



2. cumulative GPA, and
3. if needed, cumulative score on the Graduate Management Admission Test (GMAT) or its Graduate Record Examination (GRE) equivalence.

These factors are weighted in the calculation of a Readiness Index Score (RIS), which is the sum of:

1. Years Full-Time Managerial and/or Professional Work Experience<sup>1</sup> x 100
2. Cumulative GPA x 200
3. GMAT or GRE equivalent Score (if needed)

Admission decisions are based on this score. Applicants with a Readiness Index Score of:

- **1200 and above:** admitted into the MBA program with regular status
- **1050 to 1199 (or GPA below 2.7):** personal interview and additional information may be requested by MBA admissions. Admission decision could result in regular admission, provisional admission, or not admitted.
- **Below 1050:** not admitted to MBA program

## Graduate Faculty

**Rebecca Lee Badawy**, Ph.D., Assistant Professor

Identity; imposter phenomenon; person-environment fit; leadership; social influence

**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

**Ramesh Dangol**, Ph.D., Associate Professor

Strategic management; dynamic capabilities; entrepreneurial opportunity recognition; firm failures

**Rangamohan V. Eunni**, D.B.A., Professor, Chair

Strategic management; international strategy; emerging markets

**Kendra Fowler**, Ph.D., Associate Professor

Services marketing; retailing

**Guohong (Helen) Han-Haas**, Ph.D., Associate Professor

Leadership and diversity; employee attitudes and team development; social network and multilevel studies

**Deepa Gopal Iyer**, Ph.D., Assistant Professor

Open innovation; complexity in IS; IS design; requirements engineering; big data; IS security

**Birsen Karpak**, D.B.A., Professor

Management science; operations management

**Bruce Keillor**, Ph.D., Professor, Chair

Marketing strategy; firm-level political strategy; cross-cultural marketing

**Anthony J. Kos**, Ph.D., Professor

Organizational behavior; human resource management; strategic management

**Karin A. Petruska**, Ph.D., Associate Professor

Financial accounting and reporting; international accounting; earnings quality and disclosure; analyst following; forensic accounting

**Christina Saenger**, Ph.D., Assistant Professor

Consumer behavior; social media; identity; branding

**Jeremy T. Schwartz**, Ph.D., Assistant Professor

Practice-based case studies; public pensions

**Doori Song**, Ph.D., Associate Professor

Advertising effect; consumer motivation; information processing; emerging media

**Emre Ulusoy**, Ph.D., Associate Professor

Contemporary consumption; consumer sociology

**Ying Wang**, Ph.D., Associate Professor

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

The MBA program is designed around the development of individuals to become better managers and executives through developing capabilities that allow them to be better decision makers, leaders, managers, and strategic thinkers.

COURSE	TITLE	S.H.
<b>Capabilities</b>		
<b>Decision Making</b>		
FIN 6902	Financial Accounting and Finance for Decision Making	2
FIN 6912	Financial Statement Analysis	2
FIN 6923	Corporate Financial Management	2
ACCT 6922	Accounting for Managerial Decisions	2
MGT 6926	Business Analytics	2
<b>Business Leadership</b>		
MGT 6930	Managing and Leading in Organizations	2
MBA 6931	Professional Communication	1-2
<b>Managing</b>		
MGT 6941	Managing Organizational Talent	2
MKTG 6943	Consumer & Product Management	2
MGT 6944	Managing Business Processes	2
MGT 6947	Managing Information & Technology	2
MGT 6948	Project Management	2
<b>Strategic Thinking</b>		
MBA 6911	Integrated Business Solutions	2
MBA 6970	Global Business	2
MKTG 6975	Applied Marketing Strategy	2
MGT 6975	Strategic Management <sup>1</sup>	2
MGT 6976	Strategic Consulting Project <sup>1</sup>	2
MBA 6977	Comprehensive Business Analysis	1-2
<b>Specialization, Concentration, Electives</b>		
A minimum of 4 s.h. of elective course must also be taken		4
Total Semester Hours		38-40

<sup>1</sup> All applicants must submit a resume providing detail of their work experience. The resume will be reviewed to evaluate the relevance of full-time, managerial and/or professional work experience. Applicants are automatically admitted into the MBA program with regular status if they have earned a: terminal degree (PhD, MD, or JD) in any discipline, or a master's degree for an accredited U.S. college or university.

## Learning Outcomes

The Williamson MBA prepares our graduates to be successful:

- Decision Makers, skilled at utilizing analytical abilities to interpret information, diagnose business problems, and evaluate value creating solutions.
- Managers, proficient at effectively communicating (both verbal and written) analyses and recommendations, based on their knowledge of core business processes, issues, and environments.



- Strategic Thinkers, adept at formulating solutions, and making recommendations, that address complex business problems and capitalize on new opportunities.
- Leaders, capable of directing, and working with, teams to achieve business objectives.

## Graduate Courses

### **BUS 6920 Global Business Environment 3 s.h.**

The environments and operating issues affecting firms doing business in the global arena. Economic, cultural, political, legal, and competitive environments are covered, along with the global management of functional areas including finance, marketing, operations, and human resources.

**Prereq.:** Completion of all level I MBA coursework, MGT 6921, MKTG 6942, FIN 6921.

**Cross listed with** FIN 6920 and MKTG 6920 3 s.

### **BUS 6940 Data Analytics and Data Management 3 s.h.**

Course emphasis is on knowledge and skills required by accountants and managers to collect, manage, analyze extremely large volumes of data in various formats from numerous sources. Focus will be given to results that management of data brings to an organization. It will cover a broad spectrum of topics chosen from the following: predictive analytics, enterprise architecture, security, knowledge through data discovery, data visualization, ethics data quality, advanced data modeling. It will include hands-on use of available software found in industry practices, with an emphasis on spreadsheets.

### **FIN 6900 Financial Accounting and Finance for Decision Making 4 s.h.**

A survey of the fundamental concepts of financial accounting employed by general managers. Additionally, a survey of the concepts, principles, and practices of financial management used by general managers and the links between the two types of information. Permit required.

### **FIN 6902 Financial Accounting and Finance for Decision Making 1-2 s.h.**

Participants be able to utilize foundational concepts of accounting and finance so they are able to use financial statements to determine the condition of a business. Further, participants will learn how to utilize key financial ratios, which capture key elements of a firm's performance, to be better positioned to make more informed decisions.

**Prereq.:** Graduate standing.

### **FIN 6910 Business Internship 1-3 s.h.**

Provides graduate students the opportunity to relate theory to practice through on-the-job work experience with a participating organization. The internship will serve as an elective MBA course.

**Prereq.:** Completion of level I MBA coursework and six semester hours of level II MBA coursework.

### **FIN 6912 Financial Statement Analysis 2 s.h.**

Financial numbers can provide great insight to help guide and inform decisions. Participants will learn to use concepts and techniques of financial analysis to analyze reports and mini-cases of real companies to determine their financial health. Major topics include the analysis of the income statement, cash flow statement, balance sheet, and detailed examination of various financial ratios and their significance.

**Prereq.:** Graduate standing and FIN 6902.

### **FIN 6923 Corporate Financial Management 2 s.h.**

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.

### **FIN 6924 Securities Analysis 3 s.h.**

The major emphasis will be an in-depth, fundamental analysis of the investment merits of the common stock of a firm. This study will be accomplished by applying the appropriate analytical principles and valuation techniques to the firm's financial statements. A research paper will be required.

**Prereq.:** FIN 6923.

### **FIN 6939 Multinational Accounting and Finance 3 s.h.**

A cross-functional examination of selected topics in international accounting and finance with emphasis on developing research and problem-solving skills. Cases will be presented that teach the strategy and tactics of multinational corporate reporting and financial management.

**Prereq.:** FIN 6923.

### **FIN 6945 Business Valuation 3 s.h.**

A study of business valuation techniques currently used in valuing publicly traded and private equity.

**Prereq.:** "C" or better in FIN 3720 or FIN 6900.

### **FIN 6953 Advanced Financial Analysis 3 s.h.**

Applications of financial analysis to business consulting. Includes case studies and practical implementation strategies.

**Prereq.:** FIN 6923.

### **FIN 6968 Special Topics in Finance 1-3 s.h.**

Topics may vary from semester to semester and will be announced with prerequisites and hours. May be repeated.

### **FIN 6970 Seminar in Finance 3 s.h.**

Specific topics selected by the staff from timely and controversial work published in the field.

**Prereq.:** All core courses, plus at least six hours (6900-level) in the finance concentration, or permission of instructor.

### **FIN 6996 Research Problems 1-4 s.h.**

Special research project under the supervision of a graduate faculty member. Credit will be determined in each case in light of the nature and extent of the project.

**Prereq.:** Fifteen hours of level II MBA coursework or permission of MBA director.

### **MBA 6911 Integrated Business Solutions 2 s.h.**

Become a successful manager or executive, requires one to be adept at: identify/define a business problem, generating appropriate solutions, evaluating solutions, and selecting an appropriate solution, given their understanding of the problem and the dynamics of a business and the environment in which it operates. In this course you will learn concepts and techniques that will provide a strong foundation and developing these abilities. Program - MBA or General Business.

**Prereq.:** Graduate standing.

### **MBA 6931 Professional Communication 1-2 s.h.**

Effective communication is a critical component for success in the workplace. Participants will learn to design effective messages, both written and oral, for a variety of business audiences and environments. Additionally, participants will be able to manage other issues relevant to business communication, such as reputation management, employee communication and crisis management.

**Prereq.:** Graduate standing.

### **MBA 6932 Professionalism & Career Management 1 s.h.**

Participants will learn how to effectively present themselves in the workplace and position themselves for new opportunities - either through advancement or with a new organization. Participants will be able to analyze career choices through a focus on assessments and experiences, engage in more effective job search to find a career that reflects their values, skills and interests.

**Prereq.:** Graduate standing.

### **MBA 6933 Business Ethics and Social Responsibility 2 s.h.**

Today, businesses must operate in increasingly complex environments, requiring their leaders to make decisions with considerations other than just 'the bottom line.' Participants will be able to better understand their personal and social responsibilities as business managers. In addition, participants will be equipped to not only recognize ethical issues, but to react to them by applying ethical decision-making models.

**Prereq.:** Graduate standing.

**MBA 6970 Global Business 2 s.h.**

Economic, cultural, political and legal differences across countries create unique challenges in today's global business landscape. To become more effective managers in this global arena, participants will examine how these issues impact the management of finance, marketing, operations and human resources.

**Prereq.:** Graduate standing.

**MBA 6977 Comprehensive Business Analysis 1-2 s.h.**

To demonstrate a mastery of core business concepts learned throughout the MBA, participants will utilize knowledge and capabilities gained throughout the program to analyze, synthesize and present recommendations in the areas of: managing, decision making, leadership, and strategic thinking.

**Prereq.:** MGT 6975 or concurrent.

**MGT 5835 Systems Analysis and Design 3 s.h.**

Information systems and system development life cycle (SDLC) sizing tools and techniques used to document an information system.

**Prereq.:** MGT 3761 AND 2.5 GPA.

**MGT 5845 Work in America 3 s.h.**

Examines the changing characteristics, expectations, and representations of work in America. Includes the exploration of demographic, historic, economic, technological, sociological, religious, ethical, popular, and poetic perspectives on work.

**Prereq.:** MGT 3715 or Junior standing and 6 s.h. of GER approved SI courses.

**MGT 5865 Database Management Systems 3 s.h.**

Design and management of organizational data resources. Database issues include design, definition, creation, documentation update, maintenance, revision, selection, acquisition, and use. The implementation of the hierarchical, network, and relational models with emphasis on business applications.

**Prereq.:** MGT 3761 and 2.5 GPA.

**MGT 6910 Business Internship 1-3 s.h.**

Provides graduate students the opportunity to relate theory to practice through on-the-job work experience with a participating organization. The internship will serve as an elective MBA course.

**Prereq.:** Completion of level I MBA coursework and six semester hours of level II MBA coursework.

**MGT 6926 Business Analytics 2 s.h.**

Application of computer-based, mathematical modeling techniques to support managerial decision making, with emphasis on problem formation, sensitivity analysis, and other aspects of model interpretation.

**Prereq.:** Graduate Standing 2 s.h.,

**MGT 6930 Managing and Leading in Organizations 2 s.h.**

Participants will learn principle techniques and develop capabilities to allow them to become better managers. Key to this ability of being a strong manager and leader is an understanding of the interrelationship of organizational functions embodied through organization design, enhancing employee productivity, communication, authority-power relationships, group behavior, and leading organizational change.

**Prereq.:** Graduate standing.

**MGT 6941 Managing Organizational Talent 2 s.h.**

The study of individual and group motivation theories as applied to organizations with the intention of extracting optimum performance. Topics include strategic human resource management, recruitment, selection, employee testing, performance appraisal, and the design of appropriate reward systems.

**Prereq.:** Graduate standing.

**MGT 6944 Managing Business Processes 2 s.h.**

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.

**MGT 6945 Business Process Integration 2 s.h.**

This course examines the forces driving enterprise integration as well as the management decisions associated with the design and implementation of enterprise systems. Students successfully completing this course will have 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.

**MGT 6946 Supply Chain Management 2 s.h.**

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.

**MGT 6947 Managing Information & Technology 2 s.h.**

Information and technology are indispensable tools for creating business efficiencies, serving customers, and generating business opportunities. With these outcomes in focus, participants will develop capabilities that allow them to better manage the design, implementation, and utilization of information systems to create organizational value.

**Prereq.:** Graduate standing.

**MGT 6948 Project Management 2 s.h.**

Participants will develop core-capabilities of a project manager, including the ability to plan, schedule, control, allocate resources, and assess performance of organizational projects. By focusing on work breakdown structures, scheduling, PERT/CPM, controlling and managing costs, project termination, and risk management, participants will obtain a working-knowledge of fulfilling the role of project manager.

**Prereq.:** Graduate standing.

**MGT 6954 International Management 3 s.h.**

Planning, organizing, and control within the context of a multinational corporation, with emphasis upon problems of adaptation to different sociological, cultural, legal, political, and economic environmental characteristics.

**Prereq.:** MGT 6961, plus six semester hours of level II MBA coursework.

**MGT 6958 Managing in Emerging Economies 3 s.h.**

This course focuses on the macro and competitive environments in selected emerging markets, the unique institutional and regulatory factors influencing in these markets, and the strategic and operational approaches required to succeed in these markets.

**Prereq.:** Completion of level I MBA coursework and 6 hours of level II MBA coursework.

**MGT 6960 Strategic Issues Facing Multinational Enterprises in the 21st Century 3 s.h.**

This course focuses on strategic issues facing multinational enterprises to enable students to gain insight into a range of conceptual models and empirical methodologies in the field of global strategic management and to apply these concepts and models in the analysis of practical case situations.

**Prereq.:** MBA 6970.

**MGT 6968 Special Topics in Management 1-3 s.h.**

Topics may vary from semester to semester and will be announced along with prerequisites and hours. May be repeated.

**MGT 6968U Special Topics in Management Certified Associate in Project Management 1-3 s.h.**

Topics may vary from semester to semester and will be announced along with prerequisites and hours. May be repeated.

**MGT 6970 Entrepreneurship 3 s.h.**

An in-depth analysis of the elements of entrepreneurship, the process of planning and starting a business, the cross-functional skills required to manage a successful start-up, and the special circumstances of small business management.

**Prereq.:** Six semester hours of level II MBA coursework.

**MGT 6975 Strategic Management 2 s.h.**

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. Must be taken concurrently with MGT 6976. Minimum 3.0 GPA.

**Prereq.:** FIN 6923, MGT 6930, MGT 6944, MKTG 6944.

**MGT 6976 Strategic Consulting Project 2 s.h.**

An applied learning experience in which participants utilize knowledge and capabilities gained throughout the MBA program to engage in collaborative consultation with a business. The focus is on the development of strategic recommendations that will assist the client organization in addressing existing and emerging challenges.

**Prereq.:** Must be taken concurrently with MGT 6975.

**MGT 6996 Research Problems 1-3 s.h.**

Special research project under the supervision of a graduate faculty member. Credit will be determined in each case in light of the nature and extent of the project.

**Prereq.:** Fifteen hours of level II MBA courses or permission of MBA director.

**MKTG 6910 Business Internship 1-3 s.h.**

Provides graduate students the opportunity to relate theory to practice through on-the-job work experience with a participating organization. The internship will serve as an elective MBA course.

**Prereq.:** Completion of level I MBA coursework and six semester hours of level II MBA coursework.

**MKTG 6943 Consumer & Product Management 2 s.h.**

An applied examination of marketing as a business process by which products are matched with markets and through which transfers of ownership are affected.

**Prereq.:** Graduate standing.

**MKTG 6948 Global Marketing Communication 2 s.h.**

The course explores how culture and globalization impact marketing and communication activities of companies operating in multiple markets or multinational companies entering or operating in countries outside their home market. Provide extensive understanding of the issues and challenges in marketing communication through a global perspective.

**Prereq.:** MKTG 3703 or MKTG 6975.

**MKTG 6949 International Marketing Management 3 s.h.**

The functions, problems, and decision-making processes of marketing executives in business organizations involved in foreign markets are studied. Students are given the opportunity to develop foreign market evaluations applying classroom knowledge to practical decision problems. Involvement of the student on an individual basis is stressed.

**Prereq.:** MKTG 6975.

**MKTG 6951 Export Strategy 3 s.h.**

The student will learn how to manage and operate an export-based business. The focus will be on identifying local products, local companies, and an international opportunity to export by researching a specific market and working directly with local firm.

**MKTG 6968 Special Topics in Marketing 1-3 s.h.**

Topics may vary from semester to semester and will be announced along with prerequisites and hours. Course may be repeated.

**MKTG 6968N Selected Topics Customer Analytics 1-3 s.h.**

Topics may vary from semester to semester and will be announced along with prerequisites and hours. Course may be repeated.

**MKTG 6975 Applied Marketing Strategy 2 s.h.**

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.

**MKTG 6996 Research Problems 1-5 s.h.**

Special research project under the supervision of a graduate faculty member. Credit will be determined in each case in light of the nature and extent of the project.

**Prereq.:** Fifteen hours of level II MBA coursework or permission of MBA director.

## Master of Computing and Information Systems

### Program Director

Dr. Alina Lazar  
307C Meshel Hall  
(330) 941-2981  
alazar@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 is designed to serve students with some background in computing (possibly work related) but who need additional deeper, more comprehensive, or more up-to-date knowledge of computing/information systems in order to make career advancements or to better utilize the technology that they are required to use on a daily basis.

Like most applications of information systems, the program is also interdisciplinary in nature to allow students with a background in areas other than information systems to learn how to apply information systems to those areas. A number of interdisciplinary courses are supported, and students may 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.
CSIS 1590	Survey of Computer Science and Information Systems (or equivalent of information systems courses)	3
CSIS 2610	Programming and Problem-Solving (or equivalent of computer programming)	4
CSIS 3700	Data Structures and Objects (or equivalent of computer programming)	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	
INFO 3704	Business Communication (or equivalent of technical communication skills courses)	3

Equivalent employment-related experience may be substituted for some of these requirements. The experience must be described in detail and reliably documented (in a letter of recommendation from an employer, for example).

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. The

Graduate Record Examination (general test) is also required and students must obtain an acceptable score.

Students not satisfying all admission requirements may be admitted with provisional status subject to the approval of the graduate program director and the graduate dean. Such students will generally be required to take specified undergraduate and/or foundation courses, which will not count toward the master's degree.

## Graduate Faculty

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

**Coskun Bayrak**, Ph.D., Professor, Chair  
Software engineering, soft computing, Health Informatics

**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

**Yong Zhang**, Ph.D., Associate Professor  
Computer vision; image processing; biometrics; object detection and recognition; medical imaging

A minimum of 34 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.H.
<b>Core</b>		
At least half of the 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
Select one of the following:		3
CSCI 6921	Strategic Project and Change Planning	
CSCI 6940	Advanced Network Design and Administration	
CSCI 6951	Data Warehousing and Data Mining	
<b>Electives</b>		
Select a minimum of 15 s.h. of electives consisting of approved graduate and/or swing courses. Up to 9 s.h. may be taken in departments other than Computer Science and Information Systems.		15
<b>Thesis</b>		
CSCI 6999	Thesis	6
Total Semester Hours		34

## Non-Thesis Option

COURSE	TITLE	S.H.
<b>Core</b>		
At least half of the 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
Select one of the following:		3
CSCI 6921	Strategic Project and Change Planning	
CSCI 6940	Advanced Network Design and Administration	
CSCI 6951	Data Warehousing and Data Mining	
<b>Electives</b>		
Select a minimum of 18 s.h. of electives consisting of approved graduate and/or swing courses. Up to 9 s.h. may be taken in departments other than Computer Science and Information Systems.		18
<b>Capstone Project</b>		
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 6990	Computer Science Project	3
Total Semester Hours		34

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.

## 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 areas 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.

### 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.**

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 5822 Database Design and Information Retrieval 3 s.h.**

Study of physical database storage, relational and object data modeling, logical database design (normalization process), and structural query languages.

**Prereq.:** CSIS 3700 and CSCI 3710.

**CSCI 5823 Communication Networks 3 s.h.**

Study of network structures and topologies, international standards, models, communication media and protocols, hardware and software.

**Prereq.:** CSIS 3700 and either CSIS 3723 or CSIS 3740.

**CSCI 5835 Artificial Intelligence 3 s.h.**

Study of the theory and applications of intelligent systems. Topics may include general problem-solving techniques, knowledge representation and expert systems, vision and perception, and natural language processing. AI systems and languages.

**Prereq.:** CSIS 3700 or CSIS 3701.

**CSCI 5840 Theory of Finite Automata 3 s.h.**

The structural and behavioral aspects of finite automata.

**Prereq.:** CSCI 3710 and MATH 3720.

**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, cryptovvariable techniques, key management, and database security issues.

**Prereq.:** CSIS 2605 or CSIS 2610; MATH 1513 or MATH 1552 or Math Placement Test of 4 or 40 or higher; and at least 3 s.h. of upper-division departmental courses.

**CSCI 5860 Programming Language Structures 3 s.h.**

Systematic approach to the study of the structures of programming languages. Formal descriptions, syntax, semantics and technical characteristics.

**Prereq.:** CSIS 3701 and CSCI 3710.

**CSCI 5870 Data Structures and Algorithms 3 s.h.**

Study and application of analysis and design techniques to nonnumerical algorithms. Topics selected from algorithms acting on sets, trees, graphs; memory management; notions of complexity and related areas.

**Prereq.:** CSIS 3700 and CSCI 3710.

**CSCI 5881 Microcomputer System Architecture 3 s.h.**

State-of-the-art course on microcomputer architecture. Topics include introduction to microcomputer systems, 16 and 32 bit microprocessors, direct memory access and other I/O transfer schemes, architecture of I/O processors, introduction to computer communications.

**Prereq.:** CSIS 3740 and CSCI 3780.

**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 5895T Special Topics Introduction to the Theoretical Foundation of Social Networking 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 6900 Computing Information System Workshop 1-3 s.h.**

Intensive study and activity in a topic related to computing and information systems. May be repeated. Grading is S/U.

**Prereq.:** permission of graduate coordinator.

**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 6910 Computer Software Systems 3 s.h.**

Classes of software systems, system structures, systems operations. Resource management routines. Software design.

**Prereq.:** CSCI 6905 or equivalent.

**CSCI 6915 Computer Organization Architecture 3 s.h.**

Organization and architectural design of the subsystems and major functional units of modern digital computers and their interconnections.

**Prereq.:** CSCI 6905 or equivalent.

**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.

**Prereq.:** CSIS 3722 and CSIS 3723.

**CSCI 6921 Strategic Project and Change Planning 3 s.h.**

Information technology control, including organizational effects through methods, control techniques, and project tools. Cases provide domestic and international experience via initialization, planning, execution, tracking, and risk assessment. Time, reporting, resources, project relevance, organizational impact, and operational consistency are addressed through anticipatory, reactive, and crisis approaches.

**Prereq.:** CSCI 6920.

**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.:** CSIS 3722 or equivalent.

**CSCI 6951 Data Warehousing and Data Mining 3 s.h.**

Basic methodology for planning, designing, building, using, and managing a data warehouse. Legacy systems, operational data stores, and data marts. Data mining techniques for visualization and deriving information from a data warehouse for strategic decision making.

**Prereq.:** CSIS 3722.

**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.:** CSIS 3722 and either CSIS 3700 or CSCI 6901.

**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.:** CSIS 3700 or CSCI 6901.

**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.:** CSIS 3700 or CSCI 6901.

**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 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 5828 Computer Network Security 3 s.h.**

Overview of security issues that arise from computer networks, including the spectrum of security activities, methods, methodologies, and procedures. Intrusion detection, firewalls, threats and vulnerabilities, denial of service attacks, viruses and worms, encryption, and forensics.

**Prereq.:** CSIS 3723 or equivalent.

**CSIS 5837 Artificial Intelligence in Game Design 3 s.h.**

Artificial intelligence techniques for designing and programming intelligent non-player characters for a variety of different types of game genres. Finite and fuzzy state machines, terrain analysis and path planning, board games, language understanding, and learning.

**Prereq.:** CSIS 3700 or CSIS 3701 or CSIS 3726 or CSCI 6901.

**CSIS 5838 Graphics and Animation for Gaming 3 s.h.**

Design and implementation of animated characters in 3D computer games. Surface creation and effects; skeletal and facial rigging; motion and animation; basic game physics. Use of 3D animation software and scripting languages for game engine programming.

**Prereq.:** CSIS 2605 or CSIS 2610 and at least 3 s.h. of upper division CSIS courses, or CSCI 6901.

**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 6975 Ethics, Legal Issues, Privacy and Information Security 3 s.h.**

A comprehensive study of the principles and practices of computer systems security, information security management, privacy, ethics, legal issues, and compliance. This course covers the foundations for the policy, law, regulatory, and ethical accountability frameworks that information security managers work within.

## Master of Education in Intervention Services

### Introduction

The school psychology program is housed in the Beeghly College of 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. 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 about the Department of Counseling, School Psychology and Educational Leadership, contact the Department Office at 330-941-3257 or visit our Department website (<http://catalog.yzu.edu/undergraduate/colleges-programs/college-education/department-counseling-special-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.

Jake J. Protivnak, Ph.D.  
Chair / Professor  
Department of Counseling, School Psychology and Educational Leadership  
(330) 941-1936  
[jjprotivnak@ysu.edu](mailto:jjprotivnak@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.

Richard W. VanVoorhis, D.Ed., NCSP, Associate Professor  
3212 Beeghly College of Education  
(330) 941-3266

[rwvanvoorhis@ysu.edu](mailto:rwvanvoorhis@ysu.edu)

## Accreditation

An application for the initial National Association of School Psychologists (NASP) approval will be submitted during Fall 2017. Programs must first complete a three year cycle producing graduates before application may be made for full NASP approval.

## 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 cohort-based 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)
- Three letters of recommendation
- 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

**Kathleen Aspiranti**, Ph.D., Assistant Professor

School-based behavioral and academic interventions; response to intervention; autism spectrum disorders; curriculum-based measurements in reading

**Carrie R. Jackson**, D.Ed., Assistant Professor

Applied behavior analysis; autism spectrum disorders; neuropsychology; transition planning/vocational assessment

**Richard W. VanVoorhis**, D.Ed., Associate 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.
<b>Required Courses</b>		
SPSY 6901	System-Wide Consultation/Collaboration in the Schools	3
SPSY 6909	Assessment and Intervention for Students with Low Incidence Disabilities	3
SPSY 6912	Multilevel Tier Interventions Across General Education and Special Education Programming	3
COUN 6962	Counseling Theory	3
COUN 6973 & 6973L	Group Counseling Theory and Practice and Group Counseling Laboratory	3
SPSY 6904	Crisis Counseling	3
PSYC 6905	Human Growth and Development	3
PSYC 6955	Psychopathology	2
SPSY 6902	School Organization, Classroom Analysis, Cross-Categorical Settings	3
SPSY 6905	Cultural/Ethnic Issues Relating to Youth and Families	3
FOUN 6904	Introduction to Educational Research	3
FOUN 6914	Statistical Methods in Education	3
SPSY 6906	Role and Function of a School Psychologist	3
COUN 6900	Counseling Methods and Practice	3
<b>Capstone Experience</b>		
SPSY 6907	Comprehensive Readings in School Psychology	3
Total Semester Hours		44

## 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.
2. Candidates will reflect professional practices that demonstrate respect for human diversity and promote effective services, advocacy, and social justice for all children and families.
3. Candidates will demonstrate the educational foundations of school psychology including the organization and operation of general, special education plus instructional and remedial techniques.
4. 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.
6. 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 of Psychology Workshop - 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 System-Wide Consultation/Collaboration in the Schools 3 s.h.**  
Current educational practices have made collaboration an essential way education professionals do their work. This course will cover the theoretical bases and consultation/collaboration skills necessary for affecting change in the educational environment from a system wide perspective. The aim of this course is to prepare Intervention Services students to function as collaborative consultants promoting systematic and planned strategies for use within the public schools and with families with children with disabilities.

**SPSY 6902 School Organization, Classroom Analysis, Cross-Categorical Settings 3 s.h.**

Provides students in the school psychology program with the opportunity to observe and participate in educational regular education (K-12) and special education settings (SLD, CD, ED, MH, Autistic clinics, for B-21 years of age) in order to understand the organization of educational institutions they will ultimately serve as well as student population characteristics to understand the organization of educational institutions they will ultimately serve.

**SPSY 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.

**SPSY 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.

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

An overview of the professional concerns and issues school psychologists face working in public school systems. Orientation for a supervised internship experience will be discussed; future responsibilities as a professional and staff consultant. Historical, legal and ethical issues pertaining to the role of a school psychologist will be reviewed.

**SPSY 6907 Comprehensive Readings in School Psychology 3 s.h.**

Provides supervised readings and class discussions in preparation for the master's comprehensive examination.

**SPSY 6909 Assessment and Intervention for Students with Low Incidence Disabilities 3 s.h.**

Emphasis will be on current most effective practices of the professional collaboration process across three tiers of service to include specific models and strategies for students in general education and especially those with autism and/or a low incidence disability. Candidates will develop a team training model and will evaluate evidence-based practices.

**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](http://www.platw.org)).

**SPSY 6912 Multilevel Tier Interventions Across General Education and Special Education Programming 3 s.h.**

Direct experiences in planned multilevel interventions across the three tiers of services within educational school systems for regular education and children with disabilities. Participation in RTI team meetings, curriculum academic and applied and functional behavioral analysis, progress monitoring, goal attainment scaling and determining effectiveness of intervention plans will be introduced.

**SPSY 7500 Dynamic Assessment 1 3 s.h.**

This course is designed for the school psychology student and includes the administration and interpretation of intelligence tests. The goal of this course is to provide students with a series of experiences which will lead to student mastery in the administration, scoring, and interpretation of various cognitive instruments and one achievement test.

**Concurrent:** 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 assessment protocols and demonstration of behavioral observation recording.  
**Concurrent:** SPSY 7500 and SPSY 7502.

**SPSY 7502 Cognitive Observation Practicum 2 s.h.**  
Supervised experience in the administration of various psychological instruments.  
**Prereq.:** SPSY 7500 and SPSY 7501 concurrently.

**SPSY 7503 Dynamic Assessment 2 3 s.h.**  
This course is designed to provide school psychology candidates with a theoretical foundation and the attainment of assessment skills in the areas of achievement, perceptual-motor, receptive, expressive, written language skills, behavioral, self-concept, emotional, developmental history and adaptive behavior assessment.  
**Prereq.:** Candidates must have obtained a "B" or better and reached competence in SPSY 7500, SPSY 7501, and SPSY 7502.  
**Concurrent:** SPSY 7504 and SPSY 7505.

**SPSY 7504 Dynamic Assessment Child Study Practicum 2 3 s.h.**  
Candidates are provided supervised practicum experience utilizing a systematic, ecological approach to child study.  
**Prereq.:** Candidates must have obtained a "B" or better and reached competence in SPSY 7500, SPSY 7501, and SPSY 7502.  
**Concurrent:** SPSY 7503 and SPSY 7505.

**SPSY 7505 Dynamic Assessment Advanced Child Study Practicum 3 3 s.h.**  
Candidates are provided with advanced supervised practicum experiences in school systems in the area of child study.  
**Prereq.:** Candidates must have obtained a "B" or better and reached competence in SPSY 7500, SPSY 7501, and SPSY 7502.  
**Concurrent:** SPSY 7503 and SPSY 7504.

**SPSY 7506 Consultation Approaches to Treatment in Schools 3 s.h.**  
This course presents assessment procedures for ecological contexts and client needs within school contexts.  
**Concurrent:** SPSY 7507.

**SPSY 7507 Classroom Assessment and Decision Making 3 s.h.**  
The purpose of this course is to analyze and assess problems related to classroom learning environments, to plan programs to enhance environments, and to implement as well as evaluate plans. The aim of this course is to prepare school psychology students to function effectively within public school classrooms by applying various consultation models.  
**Concurrent:** SPSY 7506.

**SPSY 7508 Neuropsychology, Low Incidence and Learning Behavior 3 s.h.**  
This course is designed to provide the basics of neuroanatomy, specifically, in terms of brain organization and neurological development.  
**Prereq.:** SPSY 7500, SPSY 7501, and SPSY 7502.

**SPSY 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 of various therapeutic techniques to use with families of children with disabilities or other mental health issues.

**SPSY 7510 Professional Development Seminar in School Psychology 1 s.h.**  
This course is designed to prepare and ready school psychology candidates for their proposed internship assignment.

**SPSY 7511 School Psychology Internship Studies 3 s.h.**  
Supervised readings and class discussions in preparation for a 1400-clock-hour internship in school psychology.

**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 Interdisciplinary Visual Arts

### Program Director

Christine McCullough, MFA  
Bliss Hall 4077  
cmccullough@ysu.edu  
330-941-1862

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### Program Description

The Master of Fine Arts in Interdisciplinary Visual Arts is a two-year residency program with 60 semester credit hours, as required under the guidelines from the National Association of Schools of Art and Design (NASAD), the accrediting agency for art institutions of higher learning. The MFA in Interdisciplinary Visual Arts is unique in that it will require students to examine and integrate the methods, theory, skills and insights from two or more traditional or non-traditional visual arts with non-art coursework. The program is highly flexible to allow students unfettered access to the excellent faculty and resources within the Department of Art and provides the opportunity to connect with diverse faculty outside of the visual arts from the University at large. It fosters interdisciplinary activity, balanced integration of media, processes, and exploratory models of thinking and making. Engagement with disciplines and learning resources outside of Art & Design and within the local, national, and international community is expected and supported. The program is designed to cultivate the practice of interdisciplinarity: to promote different perspectives, methods, media and processes to creative problem solving. Drawing from the diverse expertise of an outstanding faculty, students in the MFA program are grounded in interdisciplinary theory and practice. They explore interdisciplinary exchanges that revolve around material study, concepts and critical dialog in a studio-based environment. Students explore and combine a variety of media that cross studio practices working individually and collaboratively with and across a range of traditional, analogue, and digital mediums and experimental formats infused with ideas and collaboration from disciplines outside of the visual arts. The primary goal of this program is to educate Interdisciplinary visual artists who have the potential to contribute to and move forward the dialogue of contemporary art in the 21st century.

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### Application Deadline

Admission to the MFA program is granted for the fall semester only. The application deadline for Fall 2018 is July 15.

### Admission Requirements

As the terminal degree in studio art, the MFA Program at YSU will provide an opportunity for advanced conceptual and technical development for qualified students wishing to pursue a professional career in contemporary



studio art research and practice. Admission to the program will be highly competitive and selective. Successful applicants will have a superior academic background and a strong commitment to interdisciplinary practice. MFA students are expected to have a thorough understanding of the principles of form, proficiency in various mediums and technical skills as well as a fluency in language and discourse in the historic and contemporary contexts. Applicants must follow standard procedures and normal requirements for admission into YSU College of Graduate Studies. In addition to the Graduate Admission requirements, applicants are required to have the following:

- An undergraduate degree from a regionally accredited institution (i.e., BFA, BA or equivalent experience). The undergraduate degree need not be in Studio Art but the applicant must demonstrate the competence to undertake the challenges of MFA Studies in Visual Art.
- a minimum of 48 credit hours of undergraduate work in studio courses and 12 credit hours in art history courses (the normal course of study for a BFA or BA in Art)
- a minimum cumulative undergraduate grade point average of 3.0 on a 4.0 scale
- a portfolio of work (20 digital slides or equivalent) which shows technical and conceptual competency and demonstrates the commitment and potential necessary for growth and success in the program
- A statement of purpose/artist's statement (500 to 700) words that specifically addresses your portfolio of work as well as your goals and interest in pursuing an MFA in Interdisciplinary Visual Art. Include mention of your current practice in relation to your proposed graduate study.
- a resume (no longer than two pages)
- three original letters of recommendation
- the graduate selection committee may require a personal interview of selected applicants

## Provisional Admission

*Provisional admission may be recommended if the applicant does not meet the minimum requirements. For example, if the overall undergraduate GPA is deficient (2.7 – 3.0) but the Studio Art GPA is 3.0 or higher or the portfolio of work is inadequate but suggests strong potential for success.*

*Students admitted provisionally must complete the requirements and deficiencies outlined in the letter of provisional admission within the specified timetable and must earn at least a 3.0 in the first semester (or 9 credit hours) of graduate work to continue in the program.*

The curriculum assumes adequate preparation for advanced work in studio art. Students who lack that preparation may be asked to take undergraduate level courses to successfully address any deficiencies in their technical or aesthetic training in order to change their admission status from provisional to regular. These courses will not count toward the requirements for the MFA degree.

## Graduate Faculty

**Samuel Adu-Poku**, Ph.D., Professor

Art education; curriculum development; multicultural education; teacher education

**Anthony Armeni**, M.F.A., Part-time Faculty

Sculpture

**Stephen Chalmers**, M.F.A., Associate Professor

Photography

**Joy Christiansen Erb**, M.F.A., Associate Professor

Photography; portraiture; installation

**Dragana Crnjak**, M.F.A., Associate Professor

Painting; narrative work; drawing

**Joe D'Uva**, M.F.A., Associate Professor

Printmaking

**Johnathan Farris**, Ph.D., Assistant Professor

Art History

**Rich Helfrich**, M.F.A., Assistant Professor

Graphic Design

**Lillian Lewis**, Ph.D., Assistant Professor

Art Education

**Missy McCormick**, M.F.A., Associate Professor

3D studies; ceramics

**Christine E. McCullough**, M.F.A., Professor

Painting; drawing

**Jonathan Dana Sperry**, M.F.A., Associate Professor

Digital Media

**R.J. Thompson**, M.F.A., Assistant Professor

Graphic Design

**Robert Twomey**, Ph.D., Assistant Professor

Digital Media

## Degree Requirements

Students will take courses based on the following plan:

Interdisciplinary Studio (Sculpture, ceramics, painting, drawing, photography, printmaking, mixed media, installation, digital and new media) 30 semester hours

MFA Seminar in Interdisciplinary Theory 9 semester hours

Strategies in Interdisciplinary Practice 6 semester hours

Electives (Graduate Interdisciplinary and/or Cross Disciplinary) 9 semester hours

MFA Thesis Project & Capstone Research 6 semester hours

Total 60 semester hours

### Year 1

Fall		S.H.
ART 6990	Interdisciplinary Studio	6
ART 6994	Strategies in Interdisciplinary Practice 1	3
ART 6996	Seminar in Interdisciplinary Theory 1	3
Elective		3
Semester Hours		15

### Spring

ART 6991	Interdisciplinary Studio 2	9
ART 6997	Seminar Interdisciplinary Theory 2	3
Elective		3
Semester Hours		15

### Year 2

Fall		
ART 6992	Interdisciplinary Studio 3	6
ART 6995	Strategies in Interdisciplinary Practice 2	3
ART 6998	Seminar Interdisciplinary Theory 3	3
Elective		3
Semester Hours		15

### Spring

ART 6993	Interdisciplinary Studio 4	9
ART 6999	MFA Thesis Project and Capstone Research	6
Semester Hours		15
Total Semester Hours		60

## Learning Outcomes

1. The ability to integrate interdisciplinary methods, theory, skills and insights with depth, breadth and professional competence as demonstrated by the production of a relevant body of work.
2. To cultivate and promote interdisciplinary models of hybrid thinking and artistic practice based on collaboration and diverse perspectives, methods, media and processes to solve complex and creative problems.
3. To gain a broad theoretical, historical and cultural understanding of contemporary art and the relationship of art to contemporary society.
4. The capacity to develop ideas and the ability to conduct meaningful research into various fields as necessary for the exploration and production of creative work.
5. The ability to write and speak articulately about personal artistic works and practice as well as other art and theoretical issues.
6. Develop an understanding of the pedagogy of teaching and other business practices as related to career opportunities in art.

## Graduate Courses

### ART 5840 Topics in Ancient Art 3 s.h.

The art and architecture of the ancient cultures of the Mediterranean region and the Near East. Topics vary by semester, and include Egypt, the Ancient Near East, Greece, and Rome. May be taken twice if content is different.

**Prereq.:** Junior standing.

### ART 5840C Topics in Ancient Art Greek Art and Architecture 3 s.h.

The art and architecture of the ancient cultures of the Mediterranean region and the Near East. Topics vary by semester, and include Egypt, the Ancient Near East, Greece, and Rome. May be taken twice if content is different.

**Prereq.:** Junior standing.

### ART 5850 Topics in Painting and Drawing 3 s.h.

Selected topics in advanced painting and drawing. Specific content varies by semester and includes Landscape and Interiors; Portraiture; and Personal Narrative. May be repeated with a different topic for a total of three times.

**Prereq.:** ART 2650 or portfolio presentation and permission of instructor.

### ART 5860 Topics in Design 3 s.h.

Selected topics in graphic design including typography, layout and computer applications. May be repeated for a total of three times with different topics.

**Prereq.:** Permission of instructor and portfolio.

### ART 5881 Twentieth Century Art to 1960 3 s.h.

A survey of the visual arts history of the 20th century beginning with its 19th century roots. The influential artists, movements, and motivating theories will be covered against a backdrop of world events. Primary emphasis is placed upon French Impressionism, German Expressionism, Fauvism, Surrealism, and American Abstract Expressionism.

**Prereq.:** ART 1542 or permission of instructor.

### ART 5882 Twentieth Century Art from 1960 3 s.h.

A survey of the visual arts history of the late 20th century beginning with those ideas and trends which followed Abstract Expressionism. Beginning with the late 1950s every principle artistic movement from Pop through post-Modernism will be explored against a backdrop of Post-War world events.

**Prereq.:** ART 1542 or permission of instructor.

### ART 6910 Studio Problems in Sculpture 1-3 s.h.

Individual research of the technical, visual, conceptual, and aesthetic issues of contemporary sculpture. Professional studio practices are explored as well as conceptual art issues dealing with non-traditional formats, idea-oriented artworks and the notion of 'research', and the blending of theoretical and material practice. Students develop a self-critical, articulate, and individual approach to solving aesthetic solutions to self-determined visual narratives and challenges. Repeatable for a maximum of six s.h.

**Prereq.:** Permission of instructor.

### ART 6911 Studio Problems in Sculpture 1-3 s.h.

Emphasis on building on ideas researched in ART 6910 to develop greater conceptual, aesthetic, and technical sophistication. Directed readings and writing assignments in addition to professional studio practice are used to promote further development of individual approaches to solving aesthetic solutions to self-determined visual narratives and challenges. May be repeated for a maximum of six s.h.

**Prereq.:** ART 6910.

### ART 6912 Studio Problems in Sculpture 1-3 s.h.

Students engage in the final phase of conceptual and technical refinement that will result in a cohesive body of work that demonstrates their conceptual direction and technical proficiency. Studio practice together with intense analytical discourse of current studio work and exhibition thesis drafts prepare students for the visual, written, and oral defense components of their ART 6924 capstone course experience. May be repeated for a maximum of 6 s.h.

**Prereq.:** ART 6911.

### ART 6920 Historical and Philosophical Foundations of Art Education 3 s.h.

Evaluation of the historical, chronological, and philosophical developments in art education with emphasis on significant trends and movements which have impacted its growth and structure.

**Prereq.:** Graduate status.

### ART 6921 Current Issues, Perspectives, and Curriculum Practices in Art Education 3 s.h.

A survey of current issues and legislative mandates that affect art education curriculum. Students will gain insight into curriculum development, implementation, and evaluation of art education programs.

**Prereq.:** Graduate status.

### ART 6922 Graduate Seminar in Art Education 3 s.h.

Explores contemporary events, theories, issues, trends, and practices that are influencing the field of art education.

**Prereq.:** Graduate status.

### ART 6923 Graduate Art Thesis 1-5 s.h.

Students will develop a thesis in one of three modes: scholarly thesis, studio inquiry and essay, or teaching project and report. Repeatable for up to 5 total semester hours.

**Prereq.:** Graduate status.

### ART 6924 Graduate Studio Project and Exhibition 1-5 s.h.

A professional art exhibition and written artist statement as an exit requirement and an alternative to the graduate research thesis option. Activities will include design and production of artworks for exhibition, directed readings, portfolio development, written assignments including an artist statement, oral defense of exhibition, and faculty review. The 5 s.h. requirement can be fulfilled through enrollment in ART 6924 over successive semesters at between 1-5 s.h. credit; however, students are encouraged to complete the course within two semesters.

**Prereq.:** 18 studio credits.

### ART 6930 Studio Problems in Ceramics 3 s.h.

Individual research in spatial arts imagery. Concentration on individual study in ceramic construction, firing process and calculation, formulation and firing of clay bodies, and low-fire and high-fire glaze systems. May be repeated for a maximum of six semester hours of credit.

**Prereq.:** Permission of instructor and evidence of previous work.

### ART 6931 Studio Problems in Ceramics 1-3 s.h.

Continuation of ART 6930. May be repeated for a maximum of six semester hours of credit.

**Prereq.:** ART 6930.

### ART 6932 Studio Problems in Ceramics 1-3 s.h.

Continuation of ART 6931. May be repeated for a maximum of six semester hours of credit.

**Prereq.:** ART 6931.

**ART 6940 Studio Problems in Printmaking 3 s.h.**

Individual research into monoprinting, intaglio etching, relief printing, silkscreen, lithography, and monotype. May be repeated for a maximum of six semester hours.

**Prereq.:** Portfolio presentation and permission of instructor.

**ART 6941 Studio Problems in Printmaking 1-3 s.h.**

Continuation of ART 6940. May be repeated for a maximum of six semester hours.

**Prereq.:** ART 6940.

**ART 6942 Studio Problems in Printmaking 1-3 s.h.**

Continuation of ART 6941. May be repeated for a maximum of six semester hours.

**Prereq.:** ART 6941.

**ART 6950 Studio Problems in Painting 3 s.h.**

Individual research of two-dimensional form through various media, including oil, acrylic, watercolor, collage, etc. May be repeated for a maximum of six semester hours credit.

**Prereq.:** Permission of instructor and evidence of previous work.

**ART 6951 Studio Problems in Painting 3 s.h.**

Continuation of ART 6950. May be repeated for a maximum of six semester hours credit.

**Prereq.:** ART 6950.

**ART 6952 Studio Problems in Painting 1-3 s.h.**

Continuation of ART 6951. May be repeated for a maximum of six semester hours credit.

**Prereq.:** ART 6951.

**ART 6960 Special Topics in Art History 3 s.h.**

Study in one of the many areas of art history. May be taken up to three times for credit if the topic is not repeated.

**ART 6960D Special Topics in Art History South and Southeast Asian Art and Architecture 3 s.h.**

Study in one of the many areas of art history. May be taken up to three times for credit if the topic is not repeated.

**ART 6970 Studio Problems in Photography 3 s.h.**

Individual research of photography through selected technical and aesthetic photographic topics using a variety of approaches for advanced fine art applications. May be repeated for a maximum of six semester hours of credit.

**Prereq.:** Permission of instructor and documentation of previous work.

**ART 6971 Studio Problems in Photography 3 s.h.**

Continuation of ART 6970. May be repeated for six semester hours of credit.

**Prereq.:** ART 6970.

**ART 6972 Studio Problems in Photography 3 s.h.**

Continuation of ART 6971. May be repeated for six semester hours of credit.

**Prereq.:** ART 6971.

**ART 6980 Studio Problems Digital Media 3 s.h.**

Individual research in digital forms of expression through various media, including but not limited to printed digital collage, video and Internet-based projects. May be repeated for a maximum of six semester hours of credit.

**Prereq.:** Permission of instructor and documentation of previous work.

**ART 6981 Studio Problems Digital Media 3 s.h.**

Continuation of ART 6980. May be repeated for six semester hours of credit.

**Prereq.:** ART 6980.

**ART 6982 Studio Problems Digital Media 3 s.h.**

Continuation of ART 6981. May be repeated for six semester hours of credit.

**Prereq.:** ART 6981.

**ART 6990 Interdisciplinary Studio 1-6 s.h.**

Self-motivated graduate study informed by contemporary theory and discourse. Students follow a personal, self-proposed, conceptual direction and work independently, supported by faculty. First year placed on challenging traditional ideas about creative practice by connecting and integrating various creative processes, materials and methodologies. Through scheduled critiques students present and discuss their studio research with peers and faculty.

Total of 6 s.h. with a minimum of two different faculty first year fall semester.

**Prereq.:** Admission to MFA program.

**ART 6991 Interdisciplinary Studio 2 1-9 s.h.**

Continuation of ART 6990. Self-motivated, individual studio practice. At the end of the second semester students are assessed on the ability to integrate self-directed research with the ideas and concepts proposed in the Interdisciplinary Seminar and Strategies courses. Second semester culminates in a first year group exhibition. Total of 1 to 9 s.h. with a minimum of two different faculty first year second semester.

**Prereq.:** ART 6990.

**ART 6992 Interdisciplinary Studio 3 1-6 s.h.**

Continuation of ART 6991. Self-motivated, individual studio practice. In the second year students begin research and practice leading to the MFA Thesis Project and Capstone. Total of 1 to 6 s.h. with a minimum of two different faculty second year fall semester.

**Prereq.:** ART 6991.

**ART 6992A Interdisciplinary Studio 3 1-6 s.h.**

Continuation of ART 6991. Self-motivated, individual studio practice. In the second year students begin research and practice leading to the MFA Thesis Project and Capstone. Total of 1 to 6 s.h. with a minimum of two different faculty second year fall semester.

**Prereq.:** ART 6991.

**ART 6992B Interdisciplinary Studio 3 1-6 s.h.**

Continuation of ART 6991. Self-motivated, individual studio practice. In the second year students begin research and practice leading to the MFA Thesis Project and Capstone. Total of 1 to 6 s.h. with a minimum of two different faculty second year fall semester.

**Prereq.:** ART 6991.

**ART 6992D Interdisciplinary Studio 3 1-6 s.h.**

Continuation of ART 6991. Self-motivated, individual studio practice. In the second year students begin research and practice leading to the MFA Thesis Project and Capstone. Total of 1 to 6 s.h. with a minimum of two different faculty second year fall semester.

**Prereq.:** ART 6991.

**ART 6992E Interdisciplinary Studio 3 1-6 s.h.**

Continuation of ART 6991. Self-motivated, individual studio practice. In the second year students begin research and practice leading to the MFA Thesis Project and Capstone. Total of 1 to 6 s.h. with a minimum of two different faculty second year fall semester.

**Prereq.:** ART 6991.

**ART 6992F Interdisciplinary Studio 3 1-6 s.h.**

Continuation of ART 6991. Self-motivated, individual studio practice. In the second year students begin research and practice leading to the MFA Thesis Project and Capstone. Total of 1 to 6 s.h. with a minimum of two different faculty second year fall semester.

**Prereq.:** ART 6991.

**ART 6992G Interdisciplinary Studio 3 1-6 s.h.**

Continuation of ART 6991. Self-motivated, individual studio practice. In the second year students begin research and practice leading to the MFA Thesis Project and Capstone. Total of 1 to 6 s.h. with a minimum of two different faculty second year fall semester.

**Prereq.:** ART 6991.

**ART 6993 Interdisciplinary Studio 4 1-9 s.h.**

Continuation of ART 6992. Self-motivated, individual studio practice. In the final semester students are focused on studio research and production of work for their MFA Thesis Project and Capstone. Total of 9 s.h. with a minimum of two different faculty second year spring and final semester.

**Prereq.:** ART 6992.

**ART 6994 Strategies in Interdisciplinary Practice 1 3 s.h.**

Through a wide range of readings and presentations, this course will explore the significant moments, theoretical foundations and current trends within interdisciplinary and collaborative visual art practices. These explorations will be paired with a series of long and short projects that demystify strategies and problems within the range of visual art practices discussed. The course will also discuss modes of content communication that exist across the different disciplines such as the use of specific symbols, materials, processes and context. While ideas and readings may link with the MFA seminar, this course is designed to give students a solid theoretical and practical foundation in an interdisciplinary studio art practice.

**Prereq.:** Admission to MFA program.

**ART 6995 Strategies in Interdisciplinary Practice 2 3 s.h.**

Through a wide range of readings and presentations, this course will expand on the dialogue from Strategies in Interdisciplinary Practice 1. These explorations will be paired with a series of long and short projects that demystify strategies and problems within the range visual art practices discussed. The course will also discuss modes of content communication that exist across the different disciplines, such as the use of specific symbols, materials, processes and context. While ideas and reading in this course may link and connect with the MFA seminar, this course is designed to build upon the solid theoretical and practical foundation built in Strategies in Interdisciplinary Practice.

**Prereq.:** ART 6994.

**ART 6996 Seminar in Interdisciplinary Theory 1 3 s.h.**

Covering the key concepts and topics of modern and contemporary critical theory, the course examines various aesthetic, cultural, political climates in relation to developments of interdisciplinary art practice. MFA Seminar should be taken in sequence and serve as a dynamic forum for student research, critique, discussion, and the conceptual foundation for their individual studio practices.

**Prereq.:** Admission to MFA program.

**ART 6997 Seminar Interdisciplinary Theory 2 3 s.h.**

Topic will rotate each semester and address key concepts and topics of modern and contemporary critical theory. The course provides various perspectives towards the understanding of interdisciplinary art practice and critical discourses within contemporary art culture. Students will investigate interconnections between philosophical and theoretical issues and the ways they inform and impact interdisciplinary art practice today. MFA Seminar should be taken in sequence and serve as a foundation for individual studio practices.

**Prereq.:** ART 6996.

**ART 6998 Seminar Interdisciplinary Theory 3 3 s.h.**

Topics will vary each semester and address key concepts and topics of modern and contemporary critical theory. The course provides ongoing discussion surrounding the understanding of interdisciplinary art practice and critical discourses within contemporary art culture. Students will investigate interconnections between philosophical and theoretical issues and the ways they inform and impact interdisciplinary art practice today. As the last course within MFA Seminary sequence, it serves as a foundation for individual studio practice.

**Prereq.:** ART 6996.

**ART 6999 MFA Thesis Project and Capstone Research 6 s.h.**

Programmatic exit requirement and culmination of the 60 credit MFA in Interdisciplinary Visual Arts. Activities include design and production of artworks for exhibition, directed readings, writing assignments including thesis and portfolio development, professional practices, exhibition design, oral thesis defense and faculty review.

**Prereq.:** permission of graduate advisor.

# Master of Health and Human Services

## Program Director

Dr. Joseph Lyons  
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jplyons@ysu.edu

## Program Description

The Master of Health and Human Services is a collaborative degree between The Bitonte College of Health and Human Services and the Warren P. Williamson, Jr. College of Business Administration. The program accommodates students from health and human services professions who require the skills and abilities for supervisory/managerial positions or who desire competence in health promotion and methods in the community. The program is structured as a completely online or evening college 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 Methodology	
	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, students must submit three letters of reference:

- 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).

## Graduate Faculty

**Ronald K. Chordas**, Ph.D., Lecturer

**John M. Hazy**, Ph.D., Professor, Chair  
Community health; life course issues; teaching effectiveness

**Joseph P. Lyons**, Sc.D., Associate Professor  
Health informatics; voice recognition; electronic medical records

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 23-24 semester hours distributed among the following course areas:



- tools (six semester hours),
- management skills (six semester hours), and
- issues in health and human services (12 semester hours).

A total of 12 to 13 semester hours of coursework is devoted to a specialty track in health promotion, administration for health and human service professions, and 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, which is called a practicum. 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. Students selecting the non-thesis option must successfully complete a comprehensive examination and additional courses for graduation.

COURSE	TITLE	S.H.
<b>Academic Core</b>		
<b>Tools</b> <sup>1</sup>		
CJFS 6942	Research and Statistics in Health and Human Services	3
HHS 6930	Health Informatics	3
<b>Management Skills Courses 6 sh</b>		
MGT 6930	Managing and Leading in Organizations	2
AND		
MGT 6941	Managing Organizational Talent (MGT 6930 & MGT 6941 Must be taken in the same semester)	2
MGT 6947	Managing Information & Technology	2
HHS 6971	Optimizing Performance and Commitment	3
HHS 6955	The Impact of Health Informatics on the Quality of Health Care Service	3
<b>Issues in Health and Human Services 12 sh</b>		
HHS 6949	Community Health Practice	3
HHS 6953	Health Behavior	3
HHS 6958	Health Services Issues	3
HHS 6962	Health Care Reform	3
<b>Select One of the Following Tracks</b>		
<b>Health Promotion Track 13 - 15 sh</b>		
HHS 6959	Foundation and Planning	3
HHS 6960	Implementation and Evaluation	3
HHS 6980	Seminar	3
HHS 6981	Grant Writing	3
HHS 6990	Practicum	1-2
OR		
HHS 6999	Thesis ((If Thesis Option Selected))	3
<b>Health Care Administration Track 11 - 13 sh</b>		
HHS 6918	Program Planning and Evaluation	3
HHS 6922	Planning and Fiscal Management	4
HHS 6980	Seminar	3
HHS 6990	Practicum	1-2
OR		
HHS 6999	Thesis	3
<b>Health Informatics Track 14 - 16 sh</b>		
HHS 6922	Planning and Fiscal Management	4
HHS 6935	Clinical Informatics	3
HHS 6945	Health Care System Analysis	3
HHS 6955	The Impact of Health Informatics on the Quality of Health Care Service	3
HHS 6990	Practicum	1-2
OR		

HHS 6999	Thesis	3
Total Semester Hours		77-80

- <sup>1</sup> Prerequisites for the tools courses include undergraduate research methodology, a statistics course, and ACCT 2602 Financial Accounting or equivalent.
- <sup>2</sup> Prerequisite for the management skills component is AHLT 4810 Management Skills for Health Professionals, MGT 3725 Fundamentals of Management or equivalent.

## Learning Outcomes

1. 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.
2. The student will utilize current technologies such as, computer and online systems/services, to access and communicate information.
3. The student will demonstrate effective research skills.
4. The student will produce a manuscript in a style suitable for publication.
5. The student will demonstrate skills to critically analyze health and human services issues.

## 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 4 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.

**Prereq.:** ACCT 2602 and HHS 6918 or permission of instructor.

### HHS 6925 Integration, Interoperability, and Standards 3 s.h.

This course explores the details of healthcare information technology (HIT) interoperability and standards. The evolution of the use of information technology for healthcare applications is considered, as well as the associated evolution in the need for integrating healthcare information systems across disparate organizations, healthcare disciplines, and technologies. Students will learn the process of HIT integration projects, and how that parallels the development process of interoperability standards. The course presents an in-depth look at standards critical to HIT interoperability- HL7 v2, HL7 v3 RIM, CDA, SNOMED, and FHIR- and at the use of those standards in national regulations and industry-wide efforts such as IHE. Students gain experience in navigating through standards documents and tools. Students will utilize the skills and knowledge gained to design a standards-based interoperability project.

### HHS 6930 Health Informatics 3 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. Healthcare administration competencies are demonstrated by the student in this course via integrated learning experiences. Major components of this course are as follows: (1) communication and relationship management, (2) professionalism, (3) leadership, (4) knowledge of the healthcare system, and (5) business skills and knowledge, all of which constitute the broad competencies of healthcare administrators.

**Prereq.:** acceptance to the proposed MSHI Program.

**HHS 6935 Clinical Informatics 3 s.h.**

This course will provide the nursing student with a comprehensive framework of clinical informatics knowledge. It addresses how clinical informatics assists health care organization, how information is used in clinical operations, and how information technologists interact with clinical stakeholders in provider, payer, and other healthcare organizations.

**Prereq.:** Current enrollment in the MHHS or MSN program.

**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 6950 Professional Codes in Healthcare 3 s.h.**

An analysis of professional codes and personal ethical beliefs in relationships of trust in contemporary healthcare.

**Prereq.:** PHIL 3725 Biomedical Ethics, PHIL 6900, or PHIL 6901.

**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 The Impact of Health Informatics on the Quality of Health Care Service 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 6959 Foundation and Planning 3 s.h.**

Developing effective health promotion programs through a study of the history, philosophy, ethics, and values of health promotion, as well as the principles of effective planning incorporating needs assessment and formulation of objectives.

**Prereq.:** CHHS student or permission of instructor.

**HHS 6960 Implementation and Evaluation 3 s.h.**

Examination of principles, methods, and materials of conducting and evaluating health promotion programs in various community settings. Work will be documented in evaluation reports.

**Prereq.:** HHS 6959 or permission of instructor.

**HHS 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.:** Current enrollment in MHHS program.

**HHS 6970 Organizational Behavior in Health Care 3 s.h.**

Examines the concepts of individual and group behavior in health care organizations, including theories and models associated with workplace stress, conflict management, decision-making, teamwork and leadership.

**Prereq.:** AHLT 4810, or MGT 6900, or MGT 6961.

**HHS 6971 Optimizing Performance and Commitment 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.

**Prereq.:** AHLT 4810 or MGT 6900.

**HHS 6972 Information Systems for Health and Human Services Management 3 s.h.**

An introduction to the design, implementation, and utilization of information systems. Emphasis is on the managerial and decision support aspects of information systems as well as current issues involving technology in the health and human services industries.

**Prereq.:** AHLT 4810 or MGT 6900.

**HHS 6980 Seminar 3 s.h.**

A synthesis of the role of education and management in health or human services. Emphasis on specific problems, concerns, or relative issues related to various work settings. Researched, developed, and presented using manuscript form and PowerPoint.

**Prereq.:** HHS 6958 and any research class or permission of instructor.

**HHS 6981 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.

**Prereq.:** HHS 6918 and HHS 6922 or HHS 6959 and HHS 6960; HHS 6980 or permission of instructor.

**HHS 6990 Practicum 1-2 s.h.**

Supervised practicum in selected health and human services facilities offering health and human services administration experience.

**Prereq.:** Approval of advisor.

**HHS 6999 Thesis 1-4 s.h.****HHS 8949 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.D. program in Educational Leadership and HSC 3791 Community Health or equivalent or permission of instructor. Ed.D. students who have not taken HHS 6949 are required to complete HHS 8949 and complete a supplemental, substantive course assignment involving the determinants of health and their relationship to socioeconomic factors, socioeconomic inequalities, and race vs. class.

**Prereq.:** Admission to Ed.

**HHS 8953 Health Behavior 3 s.h.**

A review of research studies, theories, and models, which identify elements that influence behavior and determine factors that deter positive behaviors.D. program in Educational Leadership and HHS 8949. Ed.D. students who have not taken HHS 6953 are required to complete HHS 8953 and complete a supplemental, substantive course assignment involving research on health and human services issues.

**Prereq.:** Admission to Ed.

**HHS 8958 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. D. program in Educational Leadership and HHS 8949. Ed.D. students who have not taken EDAD 6958 are required to complete EDAD 8958 and complete a supplemental, substantive course assignment involving research on health and human services issues.

**Prereq.:** Admission to Ed.

## Health Informatics Certificate

The Health Informatics was designed for students in the Computer Science Information Systems (CSIS) interested in working in Health Care to earn a certification credential 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.

COURSE	TITLE	S.H.
Complete 3 semester hours of the following:		3
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:		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 Warehousing and Data Mining	
HHS 6955	The Impact of Health Informatics on the Quality of Health Care Service	
Complete 6 semester 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.

## Master of Music Program Director

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## Program Description

Master's degrees are offered in music education, music performance, music history, music theory/composition, and jazz studies through the Dana School of Music, which was founded in Warren, Ohio, in 1869 as Dana's Musical Institute. A member of the National Association of Schools of Music, Dana currently enrolls 300 undergraduate and graduate students. The Dana School of Music is designated an All-Steinway School, featuring 68 Steinway pianos in addition to six mechanical action organs, two harpsichords, an electronic music laboratory, and 80 acoustically treated practice rooms, all housed in the \$6 million Bliss Hall. In addition, the University library contains a large music section, especially notable for its collected and scholarly editions, while the Multimedia Center holds several thousand recordings, and practical edition scores.

## Graduate Faculty

**Ewelina Boczkowska**, Ph.D., Associate Professor  
Music, memory, and Polish film; "auteur" cinema; American musicals; Chopin; music in the 1960's

**Kent J. Engelhardt**, Ph.D., Professor  
Charlie Parker; Bebop; Kansas City Jazz

**Francois P. Fowler**, D.M., Professor  
Guitar performance, pedagogy, and literature

**Stephen L. Gage**, Ed.D., Professor  
Instrumental music education; conducting

**Randall E. Goldberg**, Ph.D., Associate Professor, Chair  
Historical musicology; early modern Europe; 18th century music; Jewish identity

**Brian D. Kiser**, D.M.A., Professor  
Brass pedagogy; brass performance; music industry

**Christopher Krummel**, D.M.A., Professor

**Hae-Jong Lee**, D.M.A., Associate Professor  
Choral conducting and literature; voice studies

**J. Paul Louth**, Ph.D., Associate Professor  
Instrumental music education; brass methods; trombone

**David S. Morgan**, D.M.A., Professor  
Jazz performance; composition; music theory

**Allan Mosher**, D.M.A., Professor

**Caroline Oltmanns**, D.M.A., Professor  
Piano performance

**Steven M. Reale**, Ph.D., Associate Professor  
Music dramas of Richard Wagner; intersections between music and narrative; mathematical approaches to music theory; Schenkerian analysis

**Jena Root**, Ph.D., Associate Professor  
Music theory pedagogy; music technology; women composers

**Glenn Schaft**, D.M.A., Professor

Percussion; classical, contemporary, jazz, Afro-Cuban, and Brazilian music

**James C. Umble**, D.M.A., Professor  
Technology in education; music technology; music performance and pedagogy (saxophone); curriculum development in the arts; integrated arts

**Kathryn T. Umble**, D.M.A., Professor  
Japanese flute; flute; guitar

**Cicilia Yudha**, D.M.A., Associate Professor  
Piano performance (solo, collaborative, chamber music); class piano; pedagogy; literature; 20th - 21st centuries French and Indonesian musical lineages

**Misook Yun**, D.M.A., Professor  
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.

**BHRN 5800A Baritone Horn 1 s.h.**  
Private Music Lessons.

**BHRN 5800B Baritone Horn 1 s.h.**  
Private Music Lessons.

**BHRN 6901 Baritone Horn 2 s.h.**  
Private Music Lessons.

**BHRN 6902 Baritone Horn 2 s.h.**  
Private Music Lessons.

**BHRN 6903 Baritone Horn 3 s.h.**  
Private Music Lessons.

**BHRN 6904 Baritone Horn 3 s.h.**  
Private Music Lessons.

**BHRN 6905 Baritone Horn 4 s.h.**  
Private Music Lessons.

**BHRN 6906 Baritone Horn 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.

**FHRN 6903 French Horn 3 s.h.**  
Private Music Lessons.

**FHRN 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.

**GUI 5800A Guitar 1 s.h.**  
Private Music Lessons.

**GUI 5800B Guitar 1 s.h.**  
Private Music Lessons.

**GUI 6901 Guitar 2 s.h.**  
Private Music Lessons.

**GUI 6902 Guitar 2 s.h.**  
Private Music Lessons.

**GUI 6903 Guitar 3 s.h.**  
Private Music Lessons.

**GUI 6904 Guitar 3 s.h.**  
Private Music Lessons.

**GUI 6905 Guitar 4 s.h.**  
Private Music Lessons.

**GUI 6906 Guitar 4 s.h.**  
Private Music Lessons.

**HARP 5800A Harpsichord 1 s.h.**  
Private Music Lessons.

**HARP 5800B Harpsichord 1 s.h.**  
Private Music Lessons.

**HARP 6901 Harpsichord 2 s.h.**  
Private Music Lessons.

**HARP 6902 Harpsichord 2 s.h.**  
Private Music Lessons.

**HARP 6903 Harpsichord 3 s.h.**  
Private Music Lessons.

**HARP 6904 Harpsichord 3 s.h.**  
Private Music Lessons.

**HARP 6905 Harpsichord 4 s.h.**  
Private Music Lessons.

**HARP 6906 Harpsichord 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.

**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 2 s.h.**  
Course title will be listed each semester in the Schedule of Classes. May be repeated for credit with different topics.  
**Prereq.:** MUED 4823 or MUED 4825.

**MUED 5841 Music Workshop 1-3 s.h.**  
For students and teachers in service; topics may vary from year to year. Specific topics are announced each time the workshop is offered. May be repeated with different topic.

**MUED 5858 Piano Pedagogy 3 s.h.**  
Methods and materials involved in teaching piano in private and classroom settings. Fundamentals of technique as well as repertoire. Supervised practice teaching.  
**Prereq.:** Two years of applied keyboard.

**MUED 5880 Vocal Pedagogy 1 s.h.**  
A comparative study of physiological and psychological approaches to voice instruction and their application to private and class instruction.  
**Prereq.:** Two years of applied voice classes.

**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. Crosslisted with 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 6975 Music and the Humanities 3 s.h.**  
Designed to aid in the development of interdisciplinary courses involving music and the humanities in the secondary school.

**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 6981 Elementary School Music Practicum 3 s.h.**

Field experiences, demonstrations, and lectures to acquaint the student with the many facets of elementary music instruction. Contemporary trends and innovative programs will be examined. Students will be encouraged to introduce certain programs and approaches in their own teaching situations.  
**Prereq.:** Teaching experience or student teaching.

**MUED 6982 Secondary School Music Practicum 3 s.h.**

An examination of the total secondary school music program through guided field experiences, demonstrations, and lectures. The development of curriculum in general music and instrumental and vocal music will be considered in light of the student's needs and abilities.  
**Prereq.:** Teaching experience or student teaching.

**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 5871 Baroque Music 3 s.h.**

The evolution of musical styles during the period 1600-1750. A historical survey of documents and music literature of the time: opera from Monteverdi to Handel; keyboard and instrumental works; significant choral works, etc.  
**Prereq.:** MUTC 2632, MUHL 3771, MUHL 3772, MUHL 3773, and MUHL 3774.

**MUHL 5872 Eighteenth Century and the Viennese Classical School 3 s.h.**

Musical developments from the decline of the baroque to the turn of the century; historical and stylistic elements contributing to the rise of classicism and culminating in the works of Mozart, Haydn, Beethoven.  
**Prereq.:** MUTC 2632, MUHL 3771, MUHL 3772, MUHL 3773 and MUHL 3774.

**MUHL 5873 Opera History 3 s.h.**

A historical survey of opera: its development as an art form from its beginnings to the present.  
**Prereq.:** MUTC 2632, MUHL 3771, MUHL 3772, MUHL 3773 and MUHL 3774.

**MUHL 5874 Nineteenth Century 3 s.h.**

Musical developments from Beethoven through Wagner; aesthetic, formal, technical and historical trends with special emphasis on nationalism and the music drama.  
**Prereq.:** MUTC 2632, MUHL 3771, MUHL 3772, MUHL 3773, and MUHL 3774.

**MUHL 5878 Selected Topics in Music History 3 s.h.**

A study of a specific topic to be announced each time the course is offered. May be repeated once with different topic.  
**Prereq.:** MUTC 2632, MUHL 3771, MUHL 3772, MUHL 3773, and MUHL 3774.

**MUHL 5879 Vocal Literature 3 s.h.**

A study of vocal literature from all periods. Special emphasis on English language repertoire and on material especially suitable for high school students. Songs are prepared for performance in class.  
**Prereq.:** MUTC 2632, MUHL 3771, MUHL 3772, MUHL 3773, and MUHL 3774.

**MUHL 6940 Music in the Middle Ages 3 s.h.**

The development of polyphonic music, early organum to ca. 1450, with emphasis on techniques, styles, and forms. Seminar, with readings, reports, and musical illustrations.

**MUHL 6941 Music in the Renaissance 3 s.h.**

Musical developments from ca. 1450-1600 dealing with the vocal music of this period, both sacred and secular, and the formulation of independent instrumental styles. Seminar with readings, reports, and musical illustrations.

**MUHL 6943 Seminar in Musicology 3 s.h.**

An examination of select problems in musicology. May be repeated with permission of instructor.

**MUHL 6944 Seminar in Symphonic Literature 3 s.h.**

An investigation of the literature written for symphony orchestra.

**MUHL 6945 Selected Topics in Music Literature 3 s.h.**

Various topics related to the study of music literature. Specific topic is announced each time the course is offered. May be repeated with a different topic.

**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. Crosslisted with 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 6990 Thesis 1 2 s.h.**

Individual research and writing culminating in the preparation of a master's thesis.  
**Prereq.:** Completion of 15 semester hours coursework and approval of thesis proposal by the Dana Graduate Committee.

**MUHL 6991 Thesis 2 1-2 s.h.**

Individual research and writing culminating in the preparation of a master's thesis.  
**Prereq.:** Completion of 15 semester hours coursework and approval of thesis proposal by the Dana Graduate Committee.

**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 non-composition majors, MUTC 2632 with a grade of "C" or better; for non-majors, permission of instructor.

**MUTC 5840 Instrumentation 3 s.h.**

Ranges, transposition, technical characteristics, and tonal features of the instruments. Scoring for large and small ensembles which are available as laboratory reading groups.

**Prereq.:** MUTC 2632 with a grade of "C" or better.

**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 2 3 s.h.**

Continuing graduate study of musical analysis. Includes advanced techniques of harmonic, melodic, and rhythmic analysis applied to a selection of music literature from the seventeenth century through the present time.

**Prereq.:** MUTC 6921 with a grade of "B" or higher or 70% or higher on graduate entrance exam or instructor's permission.

**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.

**ORGN 5800A Organ 1 s.h.**

Private Music Lessons.

**ORGN 5800B Organ 1 s.h.**

Private Music Lessons.

**ORGN 6901 Organ 2 s.h.**

Private Music Lessons.

**ORGN 6902 Organ 2 s.h.**

Private Music Lessons.

**ORGN 6903 Organ 3 s.h.**

Private Music Lessons.

**ORGN 6904 Organ 3 s.h.**

Private Music Lessons.

**ORGN 6905 Organ 4 s.h.**

Private Music Lessons.

**ORGN 6906 Organ 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.

<b>PIAN 6901 Piano 2 s.h.</b> Private Music Lessons.	<b>TROM 6905 Trombone 4 s.h.</b> Private Music Lessons.
<b>PIAN 6902 Piano 2 s.h.</b> Private Music Lessons.	<b>TROM 6906 Trombone 4 s.h.</b> Private Music Lessons.
<b>PIAN 6903 Piano 3 s.h.</b> Private Music Lessons.	<b>TRUM 5800A Trumpet 1 s.h.</b> Private Music Lessons.
<b>PIAN 6904 Piano 3 s.h.</b> Private Music Lessons.	<b>TRUM 5800B Trumpet 1 s.h.</b> Private Music Lessons.
<b>PIAN 6905 Piano 4 s.h.</b> Private Music Lessons.	<b>TRUM 6901 Trumpet 2 s.h.</b> Private Music Lessons.
<b>PIAN 6906 Piano 4 s.h.</b> Private Music Lessons.	<b>TRUM 6902 Trumpet 2 s.h.</b> Private Music Lessons.
<b>SAX 5800A Saxophone 1 s.h.</b> Private Music Lessons.	<b>TRUM 6903 Trumpet 3 s.h.</b> Private Music Lessons.
<b>SAX 5800B Saxophone 1 s.h.</b> Private Music Lessons.	<b>TRUM 6904 Trumpet 3 s.h.</b> Private Music Lessons.
<b>SAX 6901 Saxophone 2 s.h.</b> Private Music Lessons.	<b>TRUM 6905 Trumpet 4 s.h.</b> Private Music Lessons.
<b>SAX 6902 Saxophone 2 s.h.</b> Private Music Lessons.	<b>TRUM 6906 Trumpet 4 s.h.</b> Private Music Lessons.
<b>SAX 6903 Saxophone 3 s.h.</b> Private Music Lessons.	<b>TUBA 5800A Tuba 1 s.h.</b> Private Music Lessons.
<b>SAX 6904 Saxophone 3 s.h.</b> Private Music Lessons.	<b>TUBA 5800B Tuba 1 s.h.</b> Private Music Lessons.
<b>SAX 6905 Saxophone 4 s.h.</b> Private Music Lessons.	<b>TUBA 6901 Tuba 2 s.h.</b> Private Music Lessons.
<b>SAX 6906 Saxophone 4 s.h.</b> Private Music Lessons.	<b>TUBA 6902 Tuba 2 s.h.</b> Private Music Lessons.
<b>SBSS 5800A String Bass 1 s.h.</b> Private Music Lessons.	<b>TUBA 6903 Tuba 3 s.h.</b> Private Music Lessons.
<b>SBSS 5800B String Bass 1 s.h.</b> Private Music Lessons.	<b>TUBA 6904 Tuba 3 s.h.</b> Private Music Lessons.
<b>SBSS 6901 String Bass 2 s.h.</b> Private Music Lessons.	<b>TUBA 6905 Tuba 4 s.h.</b> Private Music Lessons.
<b>SBSS 6902 String Bass 2 s.h.</b> Private Music Lessons.	<b>TUBA 6906 Tuba 4 s.h.</b> Private Music Lessons.
<b>SBSS 6903 String Bass 3 s.h.</b> Private Music Lessons.	<b>VIOL 5800A Viola 1 s.h.</b> Private Music Lessons.
<b>SBSS 6904 String Bass 3 s.h.</b> Private Music Lessons.	<b>VIOL 5800B Viola 1 s.h.</b> Private Music Lessons.
<b>SBSS 6905 String Bass 4 s.h.</b> Private Music Lessons.	<b>VIOL 6901 Viola 2 s.h.</b> Private Music Lessons.
<b>SBSS 6906 String Bass 4 s.h.</b> Private Music Lessons.	<b>VIOL 6902 Viola 2 s.h.</b> Private Music Lessons.
<b>TROM 5800A Trombone 1 s.h.</b> Private Music Lessons.	<b>VIOL 6903 Viola 3 s.h.</b> Private Music Lessons.
<b>TROM 5800B Trombone 1 s.h.</b> Private Music Lessons.	<b>VIOL 6904 Viola 3 s.h.</b> Private Music Lessons.
<b>TROM 6901 Trombone 2 s.h.</b> Private Music Lessons.	<b>VIOL 6905 Viola 4 s.h.</b> Private Music Lessons.
<b>TROM 6902 Trombone 2 s.h.</b> Private Music Lessons.	<b>VIOL 6906 Viola 4 s.h.</b> Private Music Lessons.
<b>TROM 6903 Trombone 3 s.h.</b> Private Music Lessons.	<b>VION 5800A Violin 1 s.h.</b> Private Music Lessons.
<b>TROM 6904 Trombone 3 s.h.</b> Private Music Lessons.	<b>VION 5800B Violin 1 s.h.</b> 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.

## Music Education

### Program Director

Dr. Ewelina Boczkowska  
Bliss Hall 3025  
(330) 941-1833  
eboczkowska@ysu.edu

### Program Description

Master's degrees are offered in music education, music performance, music history, music theory/composition, and jazz studies through the Dana School of Music, which was founded in Warren, Ohio, in 1869 as Dana's Musical Institute. A member of the National Association of Schools of Music, Dana currently enrolls 300 undergraduate and graduate students. The Dana School of Music is designated an All-Steinway School, featuring 68 Steinway pianos in addition to six mechanical action organs, two harpsichords, an electronic music laboratory, and 80 acoustically treated practice rooms, all housed in the \$6 million Bliss Hall. In addition, the University library contains a large music section, especially notable for its collected and scholarly editions, while the Multimedia Center holds several thousand recordings, and practical edition scores

- Completion of all requirements outlined in respective courses of study.
- Students who fail to meet the standards set by the School of Music may, upon recommendation of the Dana Graduate Committee, will be required to withdraw at the end of the semester. Any student with an overall grade-point average below 3.0 (i.e. not in good standing) for two consecutive semesters shall be dismissed from the master's program in music.
- An entrance examination and a final qualifying examination is required of all M.M candidates. Students who pass the theory entrance exam will qualify to test out of 6921 Graduate Analysis I. All students will take

three core required courses (6977 Philosophies of Music, 6922 Graduate Analysis II, 6960 Research in Music).

- Students who require a thesis (MUHL, MUTC and jazz studies) will do an oral examination on the thesis as well as take an exit examination comprised of three questions covering the content from at least one core required course and at least on specialized seminar. Music education majors electing the non-thesis option will only be required to complete the exit examination. Procedural regulations governing the final qualifying examination are available from the Coordinator of Graduate Studies in Music.
- Thesis students who have completed MUHL 6990 Thesis 1 and MUHL 6991 Thesis 2, (2+2 s.h.), and have completed all course requirements but have not defended the thesis are required to maintain current student status if they expect to receive advisor or committee assistance or utilize University services (e.g., library, computer, parking, and so forth). This can be accomplished by registering for one hour of MUHL 6991 Thesis 2.

COURSE	TITLE	S.H.
	Music Education (C) <sup>1</sup>	9
MUED 6970	Foundations of Music Education	3
MUED 6978	Contemporary Trends in Music Education	3
	Music history/music theory electives (A/B/E)	9
	5800- or 6900-level applied electives (A-F)	5
MUED 6977	Philosophies of Music	3
MUED 6960	Research in Music	3
MUTC 6922	Graduate Analysis 2	3
Music education majors may count up to four semester hours of S/U graded workshops toward degree fulfillment <sup>1</sup>		
Total Semester Hours		38

See list below:

- (A) Courses to be selected from List A
- (B) Courses to be selected from List B
- (C) Courses to be selected from List C
- (D) Courses to be selected from List D
- (E) Courses to be selected from List E
- (F) May include up to two semester hours of ensemble courses and up to four additional semester hours of applied music courses. Selection is subject to results of entrance placement examination in music theory and music history. All music electives must be approved by the advisor.

COURSE	TITLE	S.H.
<b>Music Theory and Composition (A)</b>		
MUTC 5821 & MUTC 5822	Composition for Minors and Composition for Minors	4
MUTC 5828	Music Technology	3
MUTC 5830	Materials of 20th Century Music	3
MUTC 5831	Modal Counterpoint	3
MUTC 5832	Tonal Counterpoint	3
MUTC 5833	Theory Seminar	3
MUTC 5834	Electronic Music	3
MUTC 6903 & MUTC 6904	Advanced Composition and Advanced Composition	6
MUTC 6913	Pedagogy of Theory	3
MUTC 6916	Fugue	3
MUTC 6921 & MUTC 6922	Graduate Analysis 1 and Graduate Analysis 2	6
MUTC 6930 & MUTC 6931 & MUTC 6932 & MUTC 6933	Baroque Music Styles and Classic Music Styles and Romantic Music Styles and Twentieth-Century Music Styles	12

MUTC 6935	Jazz Theory	3
MUTC 6936	Jazz Composition	3
<b>Music History (B)</b>		
MUHL 5871	Baroque Music	3
MUHL 5872	Eighteenth Century and the Viennese Classical School	3
MUHL 5873	Opera History	3
MUHL 5874	Nineteenth Century	3
MUHL 5878	Selected Topics in Music History	3
MUHL 6940	Music in the Middle Ages	3
MUHL 6941	Music in the Renaissance	3
MUHL 6943	Seminar in Musicology	3
MUHL 6946	Selected Topics in Jazz History	3
<b>Music Education (C)</b>		
MUED 5814	Selected Topics in Music Education	2
MUED 5841	Music Workshop	1-3
MUED 6970	Foundations of Music Education	3
MUED 6972	Seminar in Music Education	3
MUED 6975	Music and the Humanities	3
MUED 6976	Directed Study in Conducting	3
MUED 6978	Contemporary Trends in Music Education	3
MUED 6979	Workshop in Music Education	1-3
MUED 6981	Elementary School Music Practicum	3
MUED 6982	Secondary School Music Practicum	3
<b>Pedagogy (D)</b>		
MUED 5858	Piano Pedagogy	3
MUED 5880	Vocal Pedagogy	1
MUSIC 6913	Pedagogy of Theory	3
<b>Music Literature (E)</b>		
MUED 6950	Conducting Pedagogy	2
MUHL 5860	Keyboard Literature	3
MUHL 5879	Vocal Literature	3
MUHL 6944	Seminar in Symphonic Literature	3
MUHL 6945	Selected Topics in Music Literature	3
<b>Music Electives (F)</b>		
MUED 6973	Research Methods and Materials in Music Education	3
MUHL 6990	Thesis 1	2
MUHL 6991	Thesis 2	2
MUED 6992	Independent Projects in Music	1-4

## Learning Outcomes

1. Students will demonstrate an understanding of specialized knowledge of at least one era of Music History (MUHL). Assessment: EXIT EXAM
2. Students will demonstrate an understanding of specialized knowledge of at least one aspect of Music Theory (MUTC). Assessment: EXIT EXAM
3. Students will demonstrate research skills and techniques through the creation of an original scholarly project. Assessment: RUB RIC / FINAL ASSIGNMENT 6942 or 6973
4. Students will demonstrate the ability to write in a scholarly manner about their area of specialization within music. Assessment: RUBRIC / RECITAL DOCUMENT, THESIS, OR FINAL PROJECT IN 6973.

## 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). Students with less than a 2.7 average must provide satisfactory scores on the aptitude portion of the Graduate Record Examination. Upon admission and before the end of the first semester

of graduate study, each student must take a placement examination in music history and music theory. Failure to do so will result in an addition of six semester hours (three semester hours in music theory, three semester hours in music history) to the 32-semester-hour degree program. Theory/composition applicants must submit evidence of compositional or analytic activity. All performance degree applicants must audition on their principal instrument for acceptance to the appropriate applied music level. Students with a major in conducting performance must show evidence of conducting skill through an audition and interview. Students wishing to enroll in any music course under non-degree status must have the approval of the Coordinator of Graduate Studies in Music.

## Music Performance

### Program Director

Dr. Ewelina Boczkowska  
Bliss Hall 3025  
(330) 941-1833  
eboczkowska@ysu.edu

### Program Description

Master's degrees are offered in music education, music performance, music history, music theory/composition, and jazz studies through the Dana School of Music, which was founded in Warren, Ohio, in 1869 as Dana's Musical Institute. A member of the National Association of Schools of Music, Dana currently enrolls 300 undergraduate and graduate students. The Dana School of Music is designated an All-Steinway School, featuring 68 Steinway pianos in addition to six mechanical action organs, two harpsichords, an electronic music laboratory, and 80 acoustically treated practice rooms, all housed in the \$6 million Bliss Hall. In addition, the University library contains a large music section, especially notable for its collected and scholarly editions, while the Multimedia Center holds several thousand recordings, and practical edition scores

- Completion of all requirements outlined in respective courses of study.
- Students who fail to meet the standards set by the School of Music may, upon recommendation of the Dana Graduate Committee, will be required to withdraw at the end of the semester. Any student with an overall grade-point average below 3.0 (i.e. not in good standing) for two consecutive semesters shall be dismissed from the master's program in music.
- An entrance examination and a final qualifying examination is required of all M.M candidates. Students who pass the theory entrance exam will qualify to test out of 6921 Graduate Analysis I. All students will take three core required courses (6977 Philosophies of Music, 6922 Graduate Analysis II, 6960 Research in Music).
- Students who require a thesis (MUHL, MUTC and jazz studies) will do an oral examination on the thesis as well as take an exit examination comprised of three questions covering the content from at least one core required course and at least on specialized seminar. Performance majors will submit a document supporting the recital in lieu of a thesis, and will also complete the exit examination. Procedural regulations governing the final qualifying examination are available from the Coordinator of Graduate Studies in Music.
- Thesis students who have completed MUHL 6990 Thesis 1 and MUHL 6991 Thesis 2, (2+2 s.h.), and have completed all course requirements but have not defended the thesis are required to maintain current student status if they expect to receive advisor or committee assistance or utilize University services (e.g., library, computer, parking, and so forth). This can be accomplished by registering for one hour of MUHL 6991 Thesis 2.

COURSE	TITLE	S.H.
6900 level applied	<sup>1</sup>	12
Music History/music theory electives (A/B/E)	<sup>2</sup>	9
Music Literature (F)		3

Music Electives (A-F)	5
MUHL 6977 Philosophies of Music	3
MUHL 6960 Research in Music	3
MUTC 6922 Graduate Analysis 2	3
Conducting majors must take four semester hours of vocal or instrumental applied and eight semester hours of applied conducting. <sup>1</sup>	
Both areas must be represented in the coursework. <sup>2</sup>	
Total Semester Hours	38

See Lists below:

- (A) Courses to be selected from List A  
 (B) Courses to be selected from List B  
 (C) Courses to be selected from List C  
 (D) Courses to be selected from List D  
 (E) Courses to be selected from List E  
 (F) May include up to two semester hours of ensemble courses and up to four additional semester hours of applied music courses. Selection is subject to results of entrance placement examination in music theory and music history. All music electives must be approved by the advisor.

COURSE	TITLE	S.H.
<b>Music Theory and Composition (A)</b>		
MUTC 5821 & MUTC 5822	Composition for Minors and Composition for Minors	4
MUTC 5828	Music Technology	3
MUTC 5830	Materials of 20th Century Music	3
MUTC 5831	Modal Counterpoint	3
MUTC 5832	Tonal Counterpoint	3
MUTC 5833	Theory Seminar	3
MUTC 5834	Electronic Music	3
MUTC 6903 & MUTC 6904	Advanced Composition and Advanced Composition	6
MUTC 6913	Pedagogy of Theory	3
MUTC 6916	Fugue	3
MUTC 6921 & MUTC 6922	Graduate Analysis 1 and Graduate Analysis 2	6
MUTC 6930 & MUTC 6931 & MUTC 6932 & MUTC 6933	Baroque Music Styles and Classic Music Styles and Romantic Music Styles and Twentieth-Century Music Styles	12
MUTC 6935	Jazz Theory	3
MUTC 6936	Jazz Composition	3
<b>Music History (B)</b>		
MUHL 5871	Baroque Music	3
MUHL 5872	Eighteenth Century and the Viennese Classical School	3
MUHL 5873	Opera History	3
MUHL 5874	Nineteenth Century	3
MUHL 5878	Selected Topics in Music History	3
MUHL 6940	Music in the Middle Ages	3
MUHL 6941	Music in the Renaissance	3
MUHL 6943	Seminar in Musicology	3
MUHL 6946	Selected Topics in Jazz History	3
<b>Music Education (C)</b>		
MUED 5814	Selected Topics in Music Education	2
MUED 5841	Music Workshop	1-3
MUED 6970	Foundations of Music Education	3
MUED 6972	Seminar in Music Education	3
MUED 6975	Music and the Humanities	3
MUED 6976	Directed Study in Conducting	3

MUED 6978	Contemporary Trends in Music Education	3
MUED 6979	Workshop in Music Education	1-3
MUED 6981	Elementary School Music Practicum	3
MUED 6982	Secondary School Music Practicum	3
<b>Pedagogy (D)</b>		
MUED 5858	Piano Pedagogy	3
MUED 5880	Vocal Pedagogy	1
MUSIC 6913	Pedagogy of Theory	3
<b>Music Literature (E)</b>		
MUED 6950	Conducting Pedagogy	2
MUHL 5860	Keyboard Literature	3
MUHL 5879	Vocal Literature	3
MUHL 6944	Seminar in Symphonic Literature	3
MUHL 6945	Selected Topics in Music Literature	3
<b>Music Electives (F)</b>		
MUED 6973	Research Methods and Materials in Music Education	3
MUHL 6990	Thesis 1	2
MUHL 6991	Thesis 2	2
MUED 6992	Independent Projects in Music	1-4

## Learning Outcomes

1. Students will demonstrate an understanding of specialized knowledge of at least one era of Music History (MUHL). Assessment: EXIT EXAM
2. Students will demonstrate an understanding of specialized knowledge of at least one aspect of Music Theory (MUTC). Assessment: EXIT EXAM
3. Students will demonstrate research skills and techniques through the creation of an original scholarly project. Assessment: RUB RIC / FINAL ASSIGNMENT 6942 or 6973
4. Students will demonstrate the ability to write in a scholarly manner about their area of specialization within music. Assessment: RUBRIC / RECITAL DOCUMENT, THESIS, OR FINAL PROJECT IN 6973.

## 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). Students with less than a 2.7 average must provide satisfactory scores on the aptitude portion of the Graduate Record Examination. Upon admission and before the end of the first semester of graduate study, each student must take a placement examination in music history and music theory. Failure to do so will result in an addition of six semester hours (three semester hours in music theory, three semester hours in music history) to the 32-semester-hour degree program. Theory/composition applicants must submit evidence of compositional or analytic activity. All performance degree applicants must audition on their principal instrument for acceptance to the appropriate applied music level. Students with a major in conducting performance must show evidence of conducting skill through an audition and interview. Students wishing to enroll in any music course under non-degree status must have the approval of the Coordinator of Graduate Studies in Music.

## Music Theory and Composition Program Director

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 Bliss Hall 3025  
 (330) 941-1833  
 eboczkowska@ysu.edu

## Program Description

Master's degrees are offered in music education, music performance, music history, music theory/composition, and jazz studies through the Dana School of Music, which was founded in Warren, Ohio, in 1869 as Dana's Musical Institute. A member of the National Association of Schools of Music, Dana currently enrolls 300 undergraduate and graduate students. The Dana School of Music is designated an All-Steinway School, featuring 68 Steinway pianos in addition to six mechanical action organs, two harpsichords, an electronic music laboratory, and 80 acoustically treated practice rooms, all housed in the \$6 million Bliss Hall. In addition, the University library contains a large music section, especially notable for its collected and scholarly editions, while the Multimedia Center holds several thousand recordings, and practical edition scores

- Completion of all requirements outlined in respective courses of study.
- Students who fail to meet the standards set by the School of Music may, upon recommendation of the Dana Graduate Committee, will be required to withdraw at the end of the semester. Any student with an overall grade-point average below 3.0 (i.e. not in good standing) for two consecutive semesters shall be dismissed from the master's program in music.
- An entrance examination and a final qualifying examination is required of all M.M. candidates. Students who pass the theory entrance exam will qualify to test out of 6921 Graduate Analysis I. All students will take three core required courses (6977 Philosophies of Music, 6922 Graduate Analysis II, 6960 Research in Music).
- Students who require a thesis (MUHL, MUTC and jazz studies) will do an oral examination on the thesis as well as take an exit examination comprised of three questions covering the content from at least one core required course and at least on specialized seminar. Procedural regulations governing the final qualifying examination are available from the Coordinator of Graduate Studies in Music.
- Thesis students who have completed MUHL 6990 Thesis 1 and MUHL 6991 Thesis 2, (2+2 s.h.), and have completed all course requirements but have not defended the thesis are required to maintain current student status if they expect to receive advisor or committee assistance or utilize University services (e.g., library, computer, parking, and so forth). This can be accomplished by registering for one hour of MUHL 6991 Thesis 2.

COURSE	TITLE	S.H.
Music Theory (A) <sup>1</sup>		15
Music History (B/E)		7
5800- or 6900-level applied (A-F)		7
MUHL 6990	Thesis 1	2
MUHL 6991	Thesis 2	1-2
MUHL 6977	Philosophies of Music	3
MUHL 6960	Research in Music	3
MUTC 6922	Graduate Analysis 2	3
Students in the theory emphasis should take MUSIC 6913 Pedagogy of Theory <sup>1</sup>		
Total Semester Hours		41-42

See lists below:

- (A) Courses to be selected from List A  
 (B) Courses to be selected from List B  
 (C) Courses to be selected from List C  
 (D) Courses to be selected from List D  
 (E) Courses to be selected from List E  
 (F) May include up to two semester hours of ensemble courses and up to four additional semester hours of applied music courses. Selection is subject to results of entrance placement examination in music theory and music history. All music electives must be approved by the advisor.

COURSE	TITLE	S.H.
<b>Music Theory and Composition (A)</b>		
MUTC 5821 & MUTC 5822	Composition for Minors and Composition for Minors	4
MUTC 5828	Music Technology	3
MUTC 5830	Materials of 20th Century Music	3
MUTC 5831	Modal Counterpoint	3
MUTC 5832	Tonal Counterpoint	3
MUTC 5833	Theory Seminar	3
MUTC 5834	Electronic Music	3
MUTC 6903 & MUTC 6904	Advanced Composition and Advanced Composition	6
MUTC 6913	Pedagogy of Theory	3
MUTC 6916	Fugue	3
MUTC 6921 & MUTC 6922	Graduate Analysis 1 and Graduate Analysis 2	6
MUTC 6930 & MUTC 6931 & MUTC 6932 & MUTC 6933	Baroque Music Styles and Classic Music Styles and Romantic Music Styles and Twentieth-Century Music Styles	12
MUTC 6935	Jazz Theory	3
MUTC 6936	Jazz Composition	3
<b>Music History (B)</b>		
MUHL 5871	Baroque Music	3
MUHL 5872	Eighteenth Century and the Viennese Classical School	3
MUHL 5873	Opera History	3
MUHL 5874	Nineteenth Century	3
MUHL 5878	Selected Topics in Music History	3
MUHL 6940	Music in the Middle Ages	3
MUHL 6941	Music in the Renaissance	3
MUHL 6943	Seminar in Musicology	3
MUHL 6946	Selected Topics in Jazz History	3
<b>Music Education (C)</b>		
MUED 5814	Selected Topics in Music Education	2
MUED 5841	Music Workshop	1-3
MUED 6970	Foundations of Music Education	3
MUED 6972	Seminar in Music Education	3
MUED 6975	Music and the Humanities	3
MUED 6976	Directed Study in Conducting	3
MUED 6978	Contemporary Trends in Music Education	3
MUED 6979	Workshop in Music Education	1-3
MUED 6981	Elementary School Music Practicum	3
MUED 6982	Secondary School Music Practicum	3
<b>Pedagogy (D)</b>		
MUED 5858	Piano Pedagogy	3
MUED 5880	Vocal Pedagogy	1
MUSIC 6913	Pedagogy of Theory	3
<b>Music Literature (E)</b>		
MUED 6950	Conducting Pedagogy	2
MUHL 5860	Keyboard Literature	3
MUHL 5879	Vocal Literature	3
MUHL 6944	Seminar in Symphonic Literature	3
MUHL 6945	Selected Topics in Music Literature	3
<b>Music Electives (F)</b>		
MUED 6973	Research Methods and Materials in Music Education	3
MUHL 6990	Thesis 1	2



MUHL 6991	Thesis 2	2
MUED 6992	Independent Projects in Music	1-4

## Learning Outcomes

1. Students will demonstrate an understanding of specialized knowledge of at least one era of Music History (MUHL). Assessment: EXIT EXAM
2. Students will demonstrate an understanding of specialized knowledge of at least one aspect of Music Theory (MUTC). Assessment: EXIT EXAM
3. Students will demonstrate research skills and techniques through the creation of an original scholarly project. Assessment: RUBRIC / FINAL ASSIGNMENT 6942 or 6973
4. Students will demonstrate the ability to write in a scholarly manner about their area of specialization within music. Assessment: RUBRIC / RECITAL DOCUMENT, THESIS, OR FINAL PROJECT IN 6973.

## 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). Students with less than a 2.7 average must provide satisfactory scores on the aptitude portion of the Graduate Record Examination. Upon admission and before the end of the first semester of graduate study, each student must take a placement examination in music history and music theory. Failure to do so will result in an addition of six semester hours (three semester hours in music theory, three semester hours in music history) to the 32-semester-hour degree program. Theory/composition applicants must submit evidence of compositional or analytic activity. All performance degree applicants must audition on their principal instrument for acceptance to the appropriate applied music level. Students with a major in conducting performance must show evidence of conducting skill through an audition and interview. Students wishing to enroll in any music course under non-degree status must have the approval of the Coordinator of Graduate Studies in Music.

## Jazz Studies

- Completion of all requirements outlined in respective courses of study.
- Students who fail to meet the standards set by the School of Music may, upon recommendation of the Dana Graduate Committee, will be required to withdraw at the end of the semester. Any student with an overall grade-point average below 3.0 (i.e. not in good standing) for two consecutive semesters shall be dismissed from the master's program in music.
- An entrance examination and a final qualifying examination is required of all M.M. candidates. Students who pass the theory entrance exam will qualify to test out of 6921 Graduate Analysis I. All students will take three core required courses (6977 Philosophies of Music, 6922 Graduate Analysis II, 6960 Research in Music).
- Students who require a thesis (MUHL, MUTC and jazz studies) will do an oral examination on the thesis as well as take an exit examination comprised of three questions covering the content from at least one core required course and at least on specialized seminar. Procedural regulations governing the final qualifying examination are available from the Coordinator of Graduate Studies in Music.
- Thesis students who have completed MUHL 6990 Thesis 1 and MUHL 6991 Thesis 2, (2+2 s.h.), and have completed all course requirements but have not defended the thesis are required to maintain current student status if they expect to receive advisor or committee assistance or utilize University services (e.g., library, computer, parking, and so forth). This can be accomplished by registering for one hour of MUHL 6991 Thesis 2.

COURSE	TITLE	S.H.
MUTC 6935	Jazz Theory	3
MUTC 6936	Jazz Composition	3

MUHL 6946	Selected Topics in Jazz History	3
Music Theory (A)		3
Music History (B/E)		3
Jazz Ensemble		2
Jazz Combo		2
Applied study or electives (A-F) <sup>1</sup>		6
MUHL 6977	Philosophies of Music	3
MUHL 6960	Research in Music	3
MUTC 6922	Graduate Analysis 2	3
Must represent two areas. <sup>1</sup>		
Total Semester Hours		34

See lists below:

- (A) Courses to be selected from List A  
 (B) Courses to be selected from List B  
 (C) Courses to be selected from List C  
 (D) Courses to be selected from List D  
 (E) Courses to be selected from List E  
 (F) May include up to two semester hours of ensemble courses and up to four additional semester hours of applied music courses. Selection is subject to results of entrance placement examination in music theory and music history. All music electives must be approved by the advisor.

COURSE	TITLE	S.H.
<b>Music Theory and Composition (A)</b>		
MUTC 5821 & MUTC 5822	Composition for Minors and Composition for Minors	4
MUTC 5828	Music Technology	3
MUTC 5830	Materials of 20th Century Music	3
MUTC 5831	Modal Counterpoint	3
MUTC 5832	Tonal Counterpoint	3
MUTC 5833	Theory Seminar	3
MUTC 5834	Electronic Music	3
MUTC 6903 & MUTC 6904	Advanced Composition and Advanced Composition	6
MUTC 6913	Pedagogy of Theory	3
MUTC 6916	Fugue	3
MUTC 6921 & MUTC 6922	Graduate Analysis 1 and Graduate Analysis 2	6
MUTC 6930 & MUTC 6931 & MUTC 6932 & MUTC 6933	Baroque Music Styles and Classic Music Styles and Romantic Music Styles and Twentieth-Century Music Styles	12
MUTC 6935	Jazz Theory	3
MUTC 6936	Jazz Composition	3
<b>Music History (B)</b>		
MUHL 5871	Baroque Music	3
MUHL 5872	Eighteenth Century and the Viennese Classical School	3
MUHL 5873	Opera History	3
MUHL 5874	Nineteenth Century	3
MUHL 5878	Selected Topics in Music History	3
MUHL 6940	Music in the Middle Ages	3
MUHL 6941	Music in the Renaissance	3
MUHL 6943	Seminar in Musicology	3
MUHL 6946	Selected Topics in Jazz History	3
<b>Music Education (C)</b>		
MUED 5814	Selected Topics in Music Education	2
MUED 5841	Music Workshop	1-3
MUED 6970	Foundations of Music Education	3

MUED 6972	Seminar in Music Education	3
MUED 6975	Music and the Humanities	3
MUED 6976	Directed Study in Conducting	3
MUED 6978	Contemporary Trends in Music Education	3
MUED 6979	Workshop in Music Education	1-3
MUED 6981	Elementary School Music Practicum	3
MUED 6982	Secondary School Music Practicum	3
<b>Pedagogy (D)</b>		
MUED 5858	Piano Pedagogy	3
MUED 5880	Vocal Pedagogy	1
MUSIC 6913	Pedagogy of Theory	3
<b>Music Literature (E)</b>		
MUED 6950	Conducting Pedagogy	2
MUHL 5860	Keyboard Literature	3
MUHL 5879	Vocal Literature	3
MUHL 6944	Seminar in Symphonic Literature	3
MUHL 6945	Selected Topics in Music Literature	3
<b>Music Electives (F)</b>		
MUED 6973	Research Methods and Materials in Music Education	3
MUHL 6990	Thesis 1	2
MUHL 6991	Thesis 2	2
MUED 6992	Independent Projects in Music	1-4

## Learning Outcomes

1. Students will demonstrate an understanding of specialized knowledge of at least one era of Music History (MUHL). Assessment: EXIT EXAM
2. Students will demonstrate an understanding of specialized knowledge of at least one aspect of Music Theory (MUTC). Assessment: EXIT EXAM
3. Students will demonstrate research skills and techniques through the creation of an original scholarly project. Assessment: RUB RIC / FINAL ASSIGNMENT 6942 or 6973
4. Students will demonstrate the ability to write in a scholarly manner about their area of specialization within music. Assessment: RUBRIC / RECITAL DOCUMENT, THESIS, OR FINAL PROJECT IN 6973.

## 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). Students with less than a 2.7 average must provide satisfactory scores on the aptitude portion of the Graduate Record Examination. Upon admission and before the end of the first semester of graduate study, each student must take a placement examination in music history and music theory. Failure to do so will result in an addition of six semester hours (three semester hours in music theory, three semester hours in music history) to the 32-semester-hour degree program. Theory/composition applicants must submit evidence of compositional or analytic activity. All performance degree applicants must audition on their principal instrument for acceptance to the appropriate applied music level. Students with a major in conducting performance must show evidence of conducting skill through an audition and interview. Students wishing to enroll in any music course under non-degree status must have the approval of the Coordinator of Graduate Studies in Music.

## Music History and Literature

### Program Director

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eboczkowska@ysu.edu

## Program Description

Master's degrees are offered in music education, music performance, music history, music theory/composition, and jazz studies through the Dana School of Music, which was founded in Warren, Ohio, in 1869 as Dana's Musical Institute. A member of the National Association of Schools of Music, Dana currently enrolls 300 undergraduate and graduate students. The Dana School of Music is designated an All-Steinway School, featuring 68 Steinway pianos in addition to six mechanical action organs, two harpsichords, an electronic music laboratory, and 80 acoustically treated practice rooms, all housed in the \$6 million Bliss Hall. In addition, the University library contains a large music section, especially notable for its collected and scholarly editions, while the Multimedia Center holds several thousand recordings, and practical edition scores

- Completion of all requirements outlined in respective courses of study.
- Students who fail to meet the standards set by the School of Music may, upon recommendation of the Dana Graduate Committee, will be required to withdraw at the end of the semester. Any student with an overall grade-point average below 3.0 (i.e. not in good standing) for two consecutive semesters shall be dismissed from the master's program in music.
- An entrance examination and a final qualifying examination is required of all M.M candidates. Students who pass the theory entrance exam will qualify to test out of 6921 Graduate Analysis I. All students will take three core required courses (6977 Philosophies of Music, 6922 Graduate Analysis II, 6960 Research in Music).
- Students who require a thesis (MUHL, MUTC and jazz studies) will do an oral examination on the thesis as well as take an exit examination comprised of three questions covering the content from at least one core required course and at least on specialized seminar. Procedural regulations governing the final qualifying examination are available from the Coordinator of Graduate Studies in Music.
- Thesis students who have completed MUHL 6990 Thesis 1 and MUHL 6991 Thesis 2, (2+2 s.h.), and have completed all course requirements but have not defended the thesis are required to maintain current student status if they expect to receive advisor or committee assistance or utilize University services (e.g., library, computer, parking, and so forth). This can be accomplished by registering for one hour of MUHL 6991 Thesis 2.

COURSE	TITLE	S.H.
	Music History/Literature (B/E)	15
	Music Theory (A)	3
	5800- or 6900-level applied or electives (A-F)	7
MUHL 6990	Thesis 1	2
MUHL 6991	Thesis 2	1-2
MUHL 6977	Philosophies of Music	3
MUHL 6960	Research in Music	3
MUTC 6922	Graduate Analysis 2	3
Total Semester Hours		37-38

See lists below:

- (A) Courses to be selected from List A
- (B) Courses to be selected from List B
- (C) Courses to be selected from List C
- (D) Courses to be selected from List D
- (E) Courses to be selected from List E
- (F) May include up to two semester hours of ensemble courses and up to four additional semester hours of applied music courses. Selection is subject to results of entrance placement examination in music theory and music history. All music electives must be approved by the advisor.

COURSE	TITLE	S.H.			
			MUHL 6991	Thesis 2	2
			MUED 6992	Independent Projects in Music	1-4
<b>Music Theory and Composition (A)</b>					
MUTC 5821 & MUTC 5822	Composition for Minors and Composition for Minors	4			
MUTC 5828	Music Technology	3			
MUTC 5830	Materials of 20th Century Music	3			
MUTC 5831	Modal Counterpoint	3			
MUTC 5832	Tonal Counterpoint	3			
MUTC 5833	Theory Seminar	3			
MUTC 5834	Electronic Music	3			
MUTC 6903 & MUTC 6904	Advanced Composition and Advanced Composition	6			
MUTC 6913	Pedagogy of Theory	3			
MUTC 6916	Fugue	3			
MUTC 6921 & MUTC 6922	Graduate Analysis 1 and Graduate Analysis 2	6			
MUTC 6930 & MUTC 6931 & MUTC 6932 & MUTC 6933	Baroque Music Styles and Classic Music Styles and Romantic Music Styles and Twentieth-Century Music Styles	12			
MUTC 6935	Jazz Theory	3			
MUTC 6936	Jazz Composition	3			
<b>Music History (B)</b>					
MUHL 5871	Baroque Music	3			
MUHL 5872	Eighteenth Century and the Viennese Classical School	3			
MUHL 5873	Opera History	3			
MUHL 5874	Nineteenth Century	3			
MUHL 5878	Selected Topics in Music History	3			
MUHL 6940	Music in the Middle Ages	3			
MUHL 6941	Music in the Renaissance	3			
MUHL 6943	Seminar in Musicology	3			
MUHL 6946	Selected Topics in Jazz History	3			
<b>Music Education (C)</b>					
MUED 5814	Selected Topics in Music Education	2			
MUED 5841	Music Workshop	1-3			
MUED 6970	Foundations of Music Education	3			
MUED 6972	Seminar in Music Education	3			
MUED 6975	Music and the Humanities	3			
MUED 6976	Directed Study in Conducting	3			
MUED 6978	Contemporary Trends in Music Education	3			
MUED 6979	Workshop in Music Education	1-3			
MUED 6981	Elementary School Music Practicum	3			
MUED 6982	Secondary School Music Practicum	3			
<b>Pedagogy (D)</b>					
MUED 5858	Piano Pedagogy	3			
MUED 5880	Vocal Pedagogy	1			
MUSIC 6913	Pedagogy of Theory	3			
<b>Music Literature (E)</b>					
MUED 6950	Conducting Pedagogy	2			
MUHL 5860	Keyboard Literature	3			
MUHL 5879	Vocal Literature	3			
MUHL 6944	Seminar in Symphonic Literature	3			
MUHL 6945	Selected Topics in Music Literature	3			
<b>Music Electives (F)</b>					
MUED 6973	Research Methods and Materials in Music Education	3			
MUHL 6990	Thesis 1	2			

## Learning Outcomes

1. Students will demonstrate an understanding of specialized knowledge of at least one era of Music History (MUHL). Assessment: EXIT EXAM
2. Students will demonstrate an understanding of specialized knowledge of at least one aspect of Music Theory (MUTC). Assessment: EXIT EXAM
3. Students will demonstrate research skills and techniques through the creation of an original scholarly project. Assessment: RUBRIC / FINAL ASSIGNMENT 6942 or 6973
4. Students will demonstrate the ability to write in a scholarly manner about their area of specialization within music. Assessment: RUBRIC / RECITAL DOCUMENT, THESIS, OR FINAL PROJECT IN 6973.

## 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). Students with less than a 2.7 average must provide satisfactory scores on the aptitude portion of the Graduate Record Examination. Upon admission and before the end of the first semester of graduate study, each student must take a placement examination in music history and music theory. Failure to do so will result in an addition of six semester hours (three semester hours in music theory, three semester hours in music history) to the 32-semester-hour degree program. Theory/composition applicants must submit evidence of compositional or analytic activity. All performance degree applicants must audition on their principal instrument for acceptance to the appropriate applied music level. Students with a major in conducting performance must show evidence of conducting skill through an audition and interview. Students wishing to enroll in any music course under non-degree status must have the approval of the Coordinator of Graduate Studies in Music.

## 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

### 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. Other unique features of the program include the use of distance learning and Saturday course offerings, which accommodate the typical professional student's work schedule.

The program is structured as a weekend college program with core courses scheduled on Saturdays from 9:00 a.m. to 4:00 p.m. Alternate scheduling will be considered to accommodate students with special circumstances. Students take core courses at any one of the distance learning sites on the participating campuses. Electives are taken at The University of Akron, Cleveland State University, NEOMED, Ohio University, or YSU. Electives are taken on the campus where they are being offered and may be taken anytime during the program.

## 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.

## 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, and have acceptable GRE scores within the last five years.

GRE scores may be waived if the applicant has a professional degree (master's or doctorate) in a relevant area. 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 three letters of recommendation from individuals 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, he or she may submit letters of recommendation by supervisors from his or her place of employment. The letters should include an assessment of the applicant's current work quality and ability to successfully complete graduate training. Letters are to be mailed to the following address:

M.P.H. Admissions Committee  
Consortium of Eastern Ohio Master of Public Health  
NEOMED  
4209 State Route 44  
PO Box 95  
Rootstown, Ohio 44272

## Graduate Faculty

**Guang-Hwa (Andy) Chang**, Ph.D., Professor  
Biostatistics

**Alan M. Jacobs**, Ph.D., Professor

Environmental health sciences in public health

**Rachael J. Pohle-Krauza**, Ph.D., Professor  
Nutrition

**Keisha T. Robinson**, Dr.P.H., Associate Professor  
Epidemiology and health education/health promotion

## 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	TITLE	S.H.
<b>Core Courses</b>		
MPH 6901	Public Health Concepts	3
MPH 6902	Social and Behavioral Sciences in Public Health	3
MPH 6903	Epidemiology in Public Health	3
MPH 6904	Biostatistics in Public Health	3
MPH 6905	Health Services Administration in Public Health	3
MPH 6906	Environmental Health Sciences in Public Health	3
<b>Generalist Track</b>		
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
<b>Electives</b>		
MPH 6994	Individual Investigation in Public Health	1-3
MPH 6996	MPH Practicum	3
Elective		3
<b>Required Project</b>		
MPH 6998	Capstone Project 1	3
MPH 6999	Capstone Project 2	3
Total Semester Hours		42

## 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 well-reasoned 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 decision-making 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.

## **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 6906 Environmental Health Sciences in Public Health 3 s.h.**

Air quality, water quality, food hygiene, sanitation, solid waste management, hazardous materials management, vector-borne disease, other special topics, occupational health, legal issues, environmental hazard identification and response.

**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 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 Program Director

Dr. Kelly L. Colwell  
(330) 941-2631  
kcolwell@ysu.edu

## Program Description

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, grant writing, leadership development, and technology applications related to educational/administrative settings. Specialty tracks encourage the student to further develop their skill base in education, management, and advanced clinical applications.

## Admission Requirements

All respiratory care 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). 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
- An (optional) personal interview and/or additional information as requested by the program's admission committee.

- Students not meeting regular admission requirements may be provisionally admitted. See the *Graduate Catalog* under Provisional Admission.

Applicants must submit the following items to Graduate Admissions:

- Official transcripts from each college or institution of higher learning attended (other than YSU)
- Three (3) letters of recommendation from individuals familiar with the applicant's academic or professional background
- A letter of intent stating one's professional goals and how graduate education in respiratory therapy will help fulfill said goals
- An official report of the Graduate Record Examination (General Test) scores completed within the past five years if the applicant's cumulative grade point average is less than 2.7

## Graduate Faculty

**Kelly Colwell**, Ed.D., Assistant Professor

Distance learning; improving patient and family health literacy through education for management of chronic asthma in children; improving access to healthcare in underserved 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., Assistant 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

**Mary Yacovone**, M.Ed., Associate Professor

Adult critical care; cardiopulmonary disease management; distance education curriculum development

## Degree Requirements

COURSE	TITLE	S.H.
<b>Required Core Courses 27 sh</b>		
RESC 6900	The Respiratory Care Profession	3
RESC 6906	Respiratory Care Seminar	3
RESC 6908	Leadership Development in Respiratory Care	3
RESC 6910	Competency Assessment in Respiratory Care	3
RESC 6915	Education and Accreditation in Respiratory Care	3
RESC 6920	Technology Applications for Health and Human Services	3
RESC 6950	Respiratory Care Research	3
CJFS 6942	Research and Statistics in Health and Human Services	3
HHS 6981	Grant Writing	3
<b>Recommended Electives 3 sh</b>		
RESC 6922	Special Topics in Respiratory Care	1-3
RESC 6930	Managing Respiratory Services	3
HHS 6922	Planning and Fiscal Management	4
HHS 6950	Professional Codes in Healthcare	3
HHS 6958	Health Services Issues	3
AHLT 5807	Epidemiology	3
AHLT 5816	Environmental Regulations	3
AHLT 5840	Comparative Health Systems	3
Total Degree Hours		30 sh

## Combined Bachelors/Masters Program

Highly qualified undergraduate students can apply for admission into the combined "4+1" Bachelors/Masters program for the Master of Respiratory Care. See the description of the "4+1" program (<http://catalog.ysu.edu/undergraduate/colleges-programs/college-health-human-services/department-health-professions/bs-respiratory-care/#curriculumshheettext>) in the undergraduate catalog.

## Learning Outcomes

- 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

### RESC 6900 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 acceptance in MRC program.

### 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 self-understanding 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.

**Prereq.:** 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.

### RESC 6915 Education and Accreditation in Respiratory Care 3 s.h.

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 post-secondary settings. Students will also compare and contrast the role of accreditation in today's health care environment.

**Prereq.:** Acceptance in MRC program.

### RESC 6920 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.

### 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 6926 Advanced Mechanical Ventilation 3 s.h.

Develops the practitioner's knowledge of advanced ventilatory theory. The technological aspects and clinical application of dual control modes of ventilation, closed loop and ventilator feedback technology will be discussed. The clinical application of unconventional methods of ventilatory support such as ECMO and carbon dioxide removal, transtracheal gas insufflation and HFV will also be presented.

**Prereq.:** Acceptance in MRC program.

### RESC 6930 Managing Respiratory Services 3 s.h.

Presents a comprehensive approach to the delivery of respiratory services across the continuum of care. Management practices in traditional or acute care settings and nontraditional home care, outpatient rehabilitation facilities, sleep laboratories and long-term care institutions will be compared and contrasted. Compliance with national/state accreditation standards will also be presented.

**Prereq.:** Acceptance in MRC program.

### RESC 6943 Advanced Monitoring and Therapeutics 3 s.h.

The course is designed to analyze technical features and clinical application of 'state of the art' invasive and noninvasive monitoring devices. Specialty therapeutic procedures such as the administration of specialized medical gases and medications will also be explored. The essential elements key to successful integration of new and/or complicated therapeutic modalities and equipment into clinical practice will be highlighted.

**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

Applications are being accepted for Fall 2019.

### Program Director

Stephen Flora

DeBartolo Hall 341

[srflora@ysu.edu](mailto:srflora@ysu.edu)

330-941-1619

### 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) (<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), as well as a satisfactory score on the Graduate Record Exam (GRE). A combined (GRE-V + GRE-Q) score over 297 is strongly recommended for admission to the program. 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 Bulletin 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.

## 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

## Master of Science in Biological Sciences

### Program Director

Dr. Mark D. Womble  
4063 Ward Beecher Science Hall  
(330) 941-4727  
[mdwomble@ysu.edu](mailto:mdwomble@ysu.edu)

### Program Description

The Department of 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 Department of Biological Sciences 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 department 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 and will be approved by the student's graduate committee. 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

In addition to the minimum College of Graduate Studies admission requirements applicants must have completed:

- at least 20 semester hours of undergraduate biology courses (or equivalents which could include biochemistry) with at least a 3.0 grade point average,
- plus one year of organic chemistry,
- one year of introductory physics, and
- one semester of statistics.

Students with deficiencies in these areas should contact the Biology graduate director prior to applying for admission. The Graduate Record Examination (general test) is also required and students must obtain an acceptable score.

## Graduate Faculty

**David K. Asch**, Ph.D., Associate Professor

Gene regulation in eukaryotic organisms; carbon catabolite repression in *Neurospora crassa*

**Michael Butcher**, Ph.D., Associate Professor

Comparative biomechanics: muscle structure and function with regard to locomotion and adaptive behaviors

**Jonathan J. Caguiat**, Ph.D., Associate 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

**Diana L. Fagan**, Ph.D., Professor

Microbiology and immunology; inflammation and regulation of immune responses; stem cell in wound healing

**Jill M. Gifford**, Ph.D., Associate Professor

Effects of environmental influences on acute inflammatory and chronic neuropathic pain

**Carl G. Johnston**, Ph.D., Professor

Microbiology; microbial and fungal ecology; interactions within microbial communities

**Johanna Krontiris-Litowitz**, Ph.D., Professor

Neurobiology and physiology; regulation and phenotypic expression of collagen in ventricular hypertrophy and fibrotic diseases

**Xiangjia Min**, Ph.D., Professor

Bioinformatics; gene and genome annotation and evolutionary analysis; knowledge database development for secretomes and alternatively spliced genes

**Ian J. Renne**, Ph.D., Associate Professor

Plant community ecology; invasive species; community structure; allelopathic systems; avian ecology

**Gary R. Walker**, Ph.D., Professor, Chair

Cellular growth and movement in embryonic tissue; molecular processes underlying cell division; biofuel production

**Mark D. Womble**, Ph.D., Professor

Human anatomy; neurophysiology; histological analysis of tissues and wound healing

## Degree Requirements

Students may pursue the 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 theories through coursework and the completion of a faculty-guided research project (thesis).
- The nonthesis option allows students to gain an in-depth understanding of biology through coursework and the writing of a graduate research paper.

## Thesis Option

Under this option, students work on a faculty-guided, original research project and gain practical experience in research techniques and data collection. It is designed for students who wish to pursue careers in academic or industrial laboratories or continue toward the Ph.D. degree.

A minimum of 36 semester hours of credit is required for the M.S. degree with thesis option.

COURSE	TITLE	S.H.
BIOL 6990	Master's Thesis Research (may repeat up to a maximum of six semester hours)	1-6
BIOL 6991	Research Methods for Thesis	6
BIOL 6988	Seminar in Biological Sciences (must take two semester hours)	2
One semester hour 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		21
A minimum grade point average of 3.0 is required for graduation.		
Total Semester Hours		36

## Nonthesis Option

This option provides students with a strong understanding of biological theories and principles but does not require an original research project. It is designed for students whose future goal is a nonresearch-oriented career, such as professional school or pharmaceutical sales.

A minimum of 38 semester hours of credit is required for the M.S. degree with a nonthesis option.

COURSE	TITLE	S.H.
BIOL 6994	Research Methods for Nonthesis <sup>1</sup>	2
BIOL 6998	Topics in Physiology (must take two semester hours)	2
One semester hour of Topics (BIOL 6996-BIOL 7000)		1
An additional 33 semester hours of coursework must be completed with no more than 12 semester hours at the 5000 level		33

Students must also pass a final examination administered by their graduate committee and achieve a minimum grade point average of 3.0 for graduation.

Total Semester Hours

38

<sup>1</sup> 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 biology.
2. Students will be able to evaluate the scientific literature in the biological sciences.
3. Thesis students will conduct independent research in the biological sciences.
4. Students will create a thesis or position paper that critiques current literature, evaluates scientific data and presents 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.

### BIOL 5824L Behavioral Neuroscience Laboratory 0 s.h.

Behavioral Neuroscience Laboratory.

### BIOL 5827 Gene Manipulation 2 s.h.

Techniques of modern molecular biology including the use of restriction enzymes, plasmid and 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 5832 Principles of Neurobiology 4 s.h.

Topics include cell and molecular biology of the neuron, properties of excitable membranes, functional neuroanatomy, integrated motor control, sensory signal transduction, developmental neurobiology, mechanisms of disease processes, and higher cortical function.

**Prereq.:** BIOL 3730.

### BIOL 5833 Mammalian Endocrinology 3 s.h.

Detailed examination of the hormones of the hypothalamus, pituitary, thyroid, adrenal pancreas, gonads, and other organs with putative endocrine function. Focus on the physiological functions of hormones and their mechanisms of action with emphasis on the human.

**Prereq.:** BIOL 3730.

### BIOL 5840 Advanced Microbiology 3 s.h.

Molecular mechanisms for virulence of pathogenic organisms.

**Prereq.:** BIOL 3702 or equivalent.

### BIOL 5844 Physiology of Reproduction 3 s.h.

Current concepts of reproductive processes and their physiological control in mammalian systems.

**Prereq.:** BIOL 3730.

### BIOL 5853 Biometry 3 s.h.

Application of fundamental theory and procedures to the statistical analysis of biological data.

**Prereq.:** 20 s.h. of Biological Sciences.

### BIOL 5858 Computational Bioinformatics 3 s.h.

Project-based learning course with a focus on using a Linux environment and PERL for processing large genomic datasets and data mining. Relational database and BioPERL will also be introduced for genomic data analysis and display. Three hours of combined lecture and lab per week.

### BIOL 5861 Animal Behavior 3 s.h.

Detailed examination of a variety of topics necessary for understanding animal behavior. Historical approaches to animal behavior, evolution and behavior genetics, physiology of behavior, behavioral ecology, and social organization and mating systems.

**Prereq.:** BIOL 3741 or permission of instructor.

### BIOL 5865L Functional Human Gross Anatomy Lab 0 s.h.

Functional Human Gross Anatomy Lab.

### BIOL 5868 Gross Anatomy 1 4 s.h.

Regional study of the human body with emphasis on functional and topographic anatomy and clinical correlations. Two hours lecture-demonstration, four hours lab.

**Prereq.:** Admission to the YSU Physical Therapy program or permission of instructor.

### BIOL 5868L Gross Anatomy 1 Laboratory 0 s.h.

Gross Anatomy 1 Laboratory.

### BIOL 5869 Gross Anatomy 2 4 s.h.

Regional study of the human body with emphasis on functional and topographic anatomy and clinical correlations. Two hours lecture-demonstration, four hours lab.

**Prereq.:** BIOL 5868.

### BIOL 5869L Gross Anatomy 2 Laboratory 0 s.h.

Gross Anatomy 2 Laboratory.

### BIOL 5888 Environmental Biotechnology 4 s.h.

Lectures will cover the use of microbes for solving environmental problems. In the laboratory, teams of students will design and implement experiments in bioremediation. This course is intended for students in biology, environmental studies, chemistry, and engineering. Two hours lecture and four hours lab.

**Prereq.:** CHEM 3719 or CEEN 3736.

### BIOL 5888L Environmental Biotechnology Laboratory 0 s.h.

Environmental Biotechnology Laboratory.

**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 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 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, which 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 6929 Functional Neuroanatomy 4 s.h.**

An examination of the structure, function, integration, and cellular control of the brain and spinal cord. Three hours lecture, two hours lab. Students who have enrolled in BIOL 4929 will not receive credit for this course.

**Prereq.:** BIOL 3730 or equivalent.

**BIOL 6929L Functional Neuroanatomy Lab 0 s.h.**

Functional Neuroanatomy Lab.

**BIOL 6934 Advanced Physiology: Integrative Mechanisms 3 s.h.**

Examination of advanced human physiology through a detailed study of selected body systems. Systems examined may include the cardiovascular, respiratory, and renal systems, exchange dynamics among body fluid compartments, and acid-base balance. Three hours lecture.

**Prereq.:** BIOL 3730 or equivalent.

**BIOL 6934L Advanced Physiology: Integrative Mechanisms Laboratory 1 s.h.**

An experimental approach to the examination of advanced human physiology through a detailed study of selected body systems. Systems examined may include the cardiovascular, respiratory, and renal system, exchange dynamics among body fluid compartments, and acid-base balance. Three hours lab.

**Prereq.:** BIOL 3730 or equivalent.

**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.

**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 6951 Developmental and Comparative Neurobiology 3 s.h.**

The study of processes critical to the development, maintenance, and function of the nervous system. Topics will be presented from an experimental perspective using the scientific literature as a resource.

**Prereq.:** BIOL 3730 Human Physiology or equivalent.

**BIOL 6952 Experimental Design 3 s.h.**

Controlling variables, experimental design, and treatment of data from biological experiments.

**Prereq.:** BIOL 5853 or permission of instructor.

**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 6959 Analytical Cell Biology 4 s.h.**

Analytical concepts are applied to the study of cells and cellular processes. The use of microscopic techniques, including microtechniques, fluorescent microscopic analysis, and immunocytochemistry, are presented. Qualitative and quantitative analysis of macromolecular composition is used in answering contemporary questions in cell biology.

**Prereq.:** Graduate standing.

**BIOL 6962 Systematic Zoology 2 s.h.**

Principles, significance, and procedure of zoological taxonomy.

**Prereq.:** BIOL 3741 Animal Diversity.

**BIOL 6963 Virology 3 s.h.**

Viral structure, replication, infection, and pathogenesis. 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 6966 Protein Analysis 4 s.h.**

Students will gain experience in the analysis of proteins. Protein structure and function relationships are discussed in the context of their relevance in analytical techniques. Methods presented and used in class include protein quantification, two-dimensional gel electrophoresis, liquid chromatography, gel image analysis, and amino acid analysis. Two hours lecture and four hours laboratory.

**Prereq.:** BIOL 4836 or equivalent, and graduate standing.

**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 6993 Biology of Proteins 2 s.h.**

This course engages the student in the world of proteins, from the basic structure and function of proteins in biological systems, to the applied sciences involved in the development of commercially valuable proteins. This course extends the students previous understanding and expertise in molecular biology to emphasize proteins.

**Prereq.:** BIOL 5827 or equivalent.

**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.

**BIOL 8868 Human Gross Anatomy 1 4 s.h.**

Regional study of the human body with emphasis on functional and topographic anatomy and clinical correlations. Two hours of lecture-demonstration four hours of lab. h.

**Prereq.:** Admission to the YSU Physical Therapy Program 4 s.

**BIOL 8868L Human Gross Anatomy 1 Lab 0 s.h.**

Human Gross Anatomy I Lab.

**BIOL 8869 Human Gross Anatomy 2 4 s.h.**

Regional study of the human body with emphasis on functional and topographic anatomy and clinical correlations. Two hours lecture. Four hours lab.

**Prereq.:** BIOL 8868.

**BIOL 8869L Human Gross Anatomy 2 Lab 0 s.h.**

Human Gross Anatomy Laboratory.

## Master of Science in Chemistry

### Program Director

Dr. Sherri R. Lovelace-Cameron  
5016 Ward Beecher Science Hall  
(330) 941-1997  
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.

### 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 in chemistry or the equivalent. Ordinarily, this entails the completion of at least a year's study in both organic and physical chemistry. 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. Students must achieve an acceptable score on the Graduate Record Examination general test (GRE) for admission to the program. The Chemistry or Biochemistry subject GRE test is also required of all students who do not have a B.S. or B.A. in chemistry or biochemistry.

Students must submit three recommendation letters and responses, of less than one page, to the following four statements;

1. 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.
2. 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.
4. 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

**Larry S. Curtin**, Ph.D., Associate Professor

Electroanalytical chemistry; synthetic inorganic chemistry; self-assembled monolayers; buckminsterfullerene; conducting polymers and charge transfer salts

**Douglas T. Genna**, Ph.D., Assistant Professor

Merging organic chemistry with metal organic frame-works; stabilization of reactive intermediates

**Allen D. Hunter**, Ph.D., Professor

Materials chemistry; crystallography; instrumental Methods; chemistry education

**John A. Jackson**, Ph.D., Associate 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, photocatalytic decomposition of hydrogen sulfide; algae inhibition

**Sherri R. Lovelace-Cameron**, Ph.D., Professor

Synthesis and electrochemistry of novel organometallic polymers; synthesis of metal organic frameworks

**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., Associate Professor

Studies of bacterial functional genomics during response to stress; bacterial glutathione metabolism and the mechanism and biological role of bifunctional enzyme glutathionyl 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

A minimum of 35 semester hours of credit is required for the M.S. degree.

COURSE	TITLE	S.H.
<b>Required Courses</b>		
CHEM 6980	Introduction to Chemical Research (taken the first year)	3
CHEM 6981	Seminar 1	1
CHEM 6982	Seminar 2	1
<b>Content Chemistry Courses</b>		
Select 15 semester hours		15
<b>Electives</b>		
Select 6 semester hours in consultation with advisor		6
<b>Thesis</b>		
CHEM 6990	Thesis	9-12
Total Semester Hours		35-38

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.
<b>Required Courses</b>		
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 following each semester (does not count towards the degree):

CHEM 6976	Teaching Practicum in General Chemistry
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CHEM 6977	Teaching Practicum in Allied Health Chemistry
CHEM 6978	Teaching Practicum in Organic Chemistry
CHEM 6979	Teaching Practicum for Chemistry in Modern Living Lab

**Content Chemistry Courses**

Select 15 semester hours		15
<b>Electives</b>		
Select 6 semester hours in consultation with advisor		6
<b>Thesis</b>		
CHEM 6990	Thesis	9-12
Total Semester Hours		36-39

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.

## 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 5831 Inorganic Chemistry Laboratory 2 s.h.**

Preparation of typical inorganic compounds and their characterization. Six hours lab-discussion.

**Prereq. or concurrent:** CHEM 3729 and CHEM 3739.

**CHEM 5832 Solid State Structural Methods 3 s.h.**

The determination of structures of biological, organic, and inorganic materials in the solid state. Introduction to the crystalline state, defects, diffraction of waves, powder and single crystal diffraction methods of neutron and x-ray analysis, electron microscopy, and solid state NMR. Two hours lecture, three hours lab.

**Prereq.:** CHEM 3729.

**CHEM 5832L Solid State Structural Methods Laboratory 0 s.h.**

Solid State Structural Methods Laboratory.

**CHEM 5836 Quantum Chemistry 3 s.h.**

Basic principles of quantum chemistry, with applications to problems in molecular structure, spectroscopy and thermodynamics.

**Prereq.:** CHEM 3740.

**CHEM 5861 Polymer Science 1: Polymer Chemistry and Plastics 3 s.h.**

Preparation, characterization, structure-property relationships, morphology, and uses of the major commercial polymers. Two hours lecture, three hours lab.

**Prereq.:** CHEM 3739.

**CHEM 5861L Polymer Science 1: Polymer Chemistry and Plastics Laboratory 0 s.h.**

Polymer Science 1: Polymer Chemistry and Plastics Laboratory.

**CHEM 5862 Polymer Science 2: Polymer Rheology, Processing, and Composites 3 s.h.**

Polymer rheology, processing methods, and materials characterization. The effects of additives and the major classes of thermoplastic, thermoset, elastomeric, and composite materials. Two hours lecture, three hours lab.

**Prereq.:** CHEM 5861 or consent of the chairperson.

**CHEM 5862L Polymer Science 2: Polymer Rheology, Processing, and Composites Laboratory 0 s.h.**

Polymer Science 2: Polymer Rheology, Processing, and Composites Laboratory.

**CHEM 5876 Enzyme Analysis 2 s.h.**

Advanced biochemistry laboratory focusing on the methods of enzyme purification and characterization. One hour lecture, two hours lab.

**Prereq.:** CHEM 3785 or equivalent and CHEM 3785L or equivalent.

**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.**

Transition 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 6933 Physical Methods in Structure Determination 3 s.h.**

The determination of molecular-level structures of biological, organic, and inorganic compounds in the gas phase, solution, and solid state by diffraction and spectroscopic methods, especially X-ray crystallography and NMR spectroscopy. Three hours lecture.

**Prereq.:** CHEM 5822, CHEM 5832, 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.

**Prereq.:** CHEM 3721 Genetics and CHEM 3740 Physical Chemistry 2.

**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 reagents in organic synthesis, oxidation-reduction chemistry, and multi-step synthesis.

**Prereq.:** 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 6963 Advanced Polymer Science 3 s.h.**

Advanced methods of polymer synthesis and characterization, high performance polymers, polymerization kinetics and mechanisms, polymer processing, materials optimization, and high performance applications. Three hours lecture.

**Prereq.:** CHEM 3740 and CHEM 5861, or permission of the instructor.

**CHEM 6969 Laboratory Problems 2 s.h.**

A laboratory course that stresses individual effort in solving chemical problems. Recommended for high school chemistry teachers. Not applicable to the M.S. degree in chemistry. May be repeated up to six semester hours.

**Prereq.:** An undergraduate minor in chemistry.

**CHEM 6971 The Teaching and Learning of Chemistry 3 s.h.**

An introduction to the current literature and research problems in the teaching and learning of chemistry. Topics include theories of teaching, learning styles, assessment, problem solving, misconceptions, and the role of laboratories, recitations, and demonstrations in learning chemistry. Also includes examination of these issues as related to teaching biology.

**CHEM 6972 Methods of Chemistry Education Research 3 s.h.**

Principles of chemistry education research. Issues of problem design, data collection, and data analysis are considered from both quantitative and qualitative frameworks. Methodologies include surveys and questionnaires, think-along protocols, interviews, observations, and action research. Also includes examination of these issues as related to biology.

**CHEM 6973 Chemistry and National Science Education Standards 3 s.h.**

Implications of national standards for modifying high school chemistry instruction in a variety of classroom situations. Topics include inquiry learning, science and technology literacy, the history and nature of science, preservice science teacher education, assessment, and the impact of standards on advanced placement chemistry.

**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 concurrent:** 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 concurrent:** 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 concurrent:** CHEM 6975.

**CHEM 6979B Teaching Practicum for Chemistry in Modern Living Lab 1 2 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 6976, CHEM 6977, CHEM 6978, and CHEM 6979.

**Prereq. or concurrent:** 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 6985 Fundamental Chemistry for Educators 3 s.h.**

Fundamentals of general, organic, and biological chemistry including application to the teaching of science. Two hours lecture, three hours laboratory/discussion. Not applicable to the M.S. degree in chemistry.

**Prereq.:** Admission to the graduate program or permission of instructor.

**CHEM 6989 Special Topics in Chemistry Practicum 1-3 s.h.**

Topics selected by the faculty from fields of current research, pedagogical interest, or special emphasis. S/U grading option. May be repeated with different topics.

**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 Bellas

2149 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.

### 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 faculty of the Department of Criminal Justice and Forensic Sciences. 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 department 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 Forensic Sciences for students who do not have life experience or police academy training.

## 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 CJFS 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.

## Graduate Faculty

**Christopher M. Bellas**, Ph.D., Associate Professor  
Criminology; criminal courts; jury decision-making; substantive and procedural law

**Susan Ann Clutter**, M.F.S., Associate Professor  
Crime scene investigation; blood spatter interpretation; forensic toxicology; fingerprint development at fire scenes

**Gordon G. Frissora**, Ph.D., Associate Professor  
Policing; criminal justice information systems; artificial intelligence and criminal justice; music and community involvement

**John M. Hazy**, Ph.D., Professor, Chair  
Community health; life course issues; teaching effectiveness

**Monica Merrill**, Ph.D., Assistant Professor  
Criminology; victimization; inequalities

**Christian C. Onwudiwe**, Ph.D., Assistant Professor

**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

**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

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 nonthesis option. The Department of Criminal Justice and Forensic Sciences will accept courses from other departments offering 5000- or 6000-level courses. Students should see their graduate advisor or graduate coordinator when selecting these courses.

COURSE	TITLE	S.H.
<b>Study in the general substantive areas of criminal justice, met by completing the graduate core of:</b>		
CJFS 6910	Law and Criminal Justice	3
CJFS 6920	Criminal Justice Studies, Practices, and Theories	3
CJFS 6925	Administration and Management Theory	3
CJFS 6942	Research and Statistics in Health and Human Services	3
CJFS 6970	Applied Police Management	3
Any departure from this requires prior approval of the student's committee and graduate coordinator.		
CJFS 6980	Managing Correctional Operations	3
<b>Study in courses outside the core</b>		
Graduate Research Paper		2
Oral Exam (defense)		

## 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 nonthesis option will require a major graduate research paper worth two credits and an oral exam (defense) upon its completion.

## Learning Outcomes

1. Students will be able to assess the professional criminal justice literature.
2. Students will employ key criminal justice concepts to administrate programs and lead others.
3. Students will be able to assess legal situations that relate to the CJ system.
4. Students will be able to assess programs and public policies that relate to the CJ system.

## Graduate Courses

### CJFS 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.:** CJFS 3702 or approval of instructor.

### CJFS 5814 Practice and Ethics in Forensic Science 3 s.h.

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.

**Gen Ed:** Capstone.

### CJFS 5820 Advanced Legal Research 3 s.h.

Advanced techniques in conducting legal research using standard reference tools as well as automated on-line services and the Internet. Analysis of findings of legal issues related to criminal justice, report and memoranda writing utilizing the Harvard University System of Citations, legal forms and terminology.

**Prereq.:** CJFS 3720 or approval of instructor.

**CJFS 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.:** CJFS 3719 and must be a criminal justice major or have permission of chairperson.

**CJFS 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.:** CJFS 3735.

**CJFS 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.:** CJFS 3712 or CJFS 3765.

**CJFS 5875 Juvenile Justice System 3 s.h.**

In-depth analysis of the specialized agencies and procedures developed to deal with problems of juveniles from a historical and philosophical perspective. Consideration of the juvenile court, community-based programs, institutionalization.

**Prereq.:** Senior standing.

**CJFS 5892 Comparative and International Criminal Justice Systems 3 s.h.**

An examination of how countries' criminal justice systems are shaped and molded by elements of culture, religion, and political ideology of the area. Emphasis will be placed on comparing and contrasting the selected countries' criminal justice systems with those found in the United States of America.

**Prereq.:** Senior standing or permission of the chair.

**CJFS 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.

**CJFS 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.:** CJFS 2630.

**CJFS 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.:** CJUS 1500 Introduction to Criminal Justice.

**CJFS 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.

**CJFS 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.

**Prereq.:** CJFS 6942 or permission of instructor.

**CJFS 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.

**Prereq.:** CJFS 3710 and CJFS 3712 or permission of instructor.

**CJFS 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.

**Prereq.:** CJFS 6942 or permission of the instructor.

**CJFS 6950 Selected Topics Seminar 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.

**CJFS 6955 Independent Study 3 s.h.**

Study under the personal supervision of a faculty member with the approval of the graduate director. May be repeated once.

**CJFS 6957 Readings in Criminal Justice 1-4 s.h.**

Extensive reading assignments in the student's interest area under the supervision of a graduate faculty member. May be repeated for no more than a total of six semester hours.

**Prereq.:** Approval of graduate director.

**CJFS 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.

**CJFS 6970 Applied Police Management 3 s.h.**

Systematic examination of the principles and practices related to the management of police organizations. Examples will reflect problems of the urban and suburban environments, relationships with political entities, and internal control.

**CJFS 6971 Human Resources in Policing 3 s.h.**

Evaluation of police personnel systems, employment qualifications, psychiatric screening, polygraph examination, minority recruitment, and police cadet systems, personnel costs, educational requirements, lateral entry, mandated state minimum training standards, and federal involvement in police manpower.

**CJFS 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 the affect financial management, human resources, community relations, homeland security, and the treatment of vulnerable populations.

**Prereq.:** CJFS 6925.

**CJFS 6980 Managing Correctional Operations 3 s.h.**

Historical review of corrections in the United States. Modern theories of correctional administration and organization in both facilities and community settings. Special focus on financial operations, contagious illnesses, security, staff management, corruption, programming, architecture, hostage situations, and community concerns.

**CJFS 6981 Correctional Case Management 3 s.h.**

Case management, presentencing investigation, classification, and risk assessment. Analysis of theories of rehabilitation as applied in corrections. Special focus on training, recreation, health care and mental health services, religious programs, and special needs offenders, including sexual and drug offenders.

**CJFS 6985 Grant Writing 3 s.h.**

Insite 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.

**Prereq.:** CJFS 6940, CJFS 6945, and CJFS 6975 or permission of instructor.

**CJFS 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.

**CJFS 6995 Criminal Justice Practicum 3-6 s.h.**

Supervised experience in an applied criminal justice setting. Permit required.

**Prereq.:** Majority of core and track courses completed and the recommendation of student's committee and approval by graduate director.

**CJFS 6998 Graduate Paper 2 s.h.**

Graduate-level research and a comparable paper under the supervision of the student's major professor.

**CJFS 6999 Research and Thesis 1-6 s.h.**

## Master of Science in Environmental Science

### Program Director

Dr. Felicia Armstrong  
2080 Moser Hall  
(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 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/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.

### 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.

## Graduate Faculty

**Isam E. Amin**, Ph.D., Professor

Ground water contamination and remediation; characterization and remediation of Mahoning River banks; sediment transport in rivers and streams; intra-state water conflicts

**Felicia P. Armstrong**, Ph.D., Associate Professor

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

**Jeffrey C. Dick**, Ph.D., Professor, Chair

Groundwater contamination; water quality characterization/baseline investigations and petroleum geology

**Alan M. Jacobs**, Ph.D., Professor

Environmental health sciences in public health

**Colleen McLean**, Ph.D., Associate Professor

Aqueous and environmental geochemistry; paleolimnology; biogeochemistry

**Ian J. Renne**, Ph.D., Associate 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 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 Science 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.

COURSE	TITLE	S.H.
<b>Required Courses</b>		
ENST 6900	Advanced Environmental Studies	3
BIOL 5853	Biometry	3

Select two of the following:	6
ENST 5800 Environmental Impact Assessment	
ENST 5830 Risk Assessment	
ENST 5860 Environmental Regulations	
ENST 6901 Sources of Contamination	
ENST 6920 Environmental Compliance	
ENST 6921 Industry/Institutional Management for the Environmental Professional	
ENST 6931 Ecological Risk Assessment	
<b>Electives</b>	
Select an additional 15 semester hours. Elective courses can come from Environmental Science, Geology, Biology, Civil/Environmental Engineering, Geography, Chemistry or other disciplines recommended by the graduate committee.	15
Note: Additional ENST courses may be taken as electives.	
ENST 6995 Introduction to Environmental Science Research (recommended)	
ENST 5810 Environmental Safety (recommended)	
<b>Thesis</b>	
ENST 6990 Thesis	6
Total Semester Hours	33

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 School 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 an environmental problem and formulate conclusions.

Demonstrate ability to apply appropriate field-and laboratory-based methods (of acquiring, quantitatively and qualitatively analyzing and interpreting environmental data and information).

Apply environmental science research as demonstrated by the successful completion of the comprehensive exam and a Master's thesis.

## Graduate Courses

### ENST 5810 Environmental Safety 1 s.h.

The proper use of environmental monitoring instruments and personal protective gear. Participation in a series of realistic, hands-on simulation exercises that address a variety of waste clean-up situations. Class meets three hours per week.

**Prereq.:** ENST 2600 or equivalent experience.

### 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 Risk Assessment 3 s.h.

An in-depth study of human health and ecological risk assessment. Includes hazard identification, dose-response evaluation, exposure assessment, and the characterization, limitations, management, communication, and perceptions of risk. Standard procedures to conduct a site-specific baseline risk assessment, to calculate risk-based concentrations that may be used to develop preliminary remediation goals, and to evaluate human health risks during the implementation of remedial alternatives.

**Prereq.:** ENST 3700, ENST 5860, and 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 5888 Environmental Biotechnology 4 s.h.

Lectures will cover the use of microbes for solving environmental problems. In the laboratory, teams of students will design and implement experiments in bioremediation. This course is intended for students in biology, environmental studies, chemistry, and engineering. Two hours lecture and four hours lab.

**Prereq.:** CHEM 3719 or CEEN 3736.

### 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 6910 Environmental Management Systems Standards (ISO 14001) 1 s.h.

Introduction to establishing a program to set internal industrial standards to identify, measure, and control the environmental impact of their activities, products, and services, including environmental policy, communication, legal requirements, training, documentation, and emergency preparedness.

### 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 6930 Risk Management 3 s.h.**

Using the principles of risk assessment, the student will learn to manage existing environmental risks in the workplace. Topics will include workplace health hazards; product liability; toxic tort claims; cleaning strategies for risk reduction such as brownfield redevelopment, voluntary action programs, alternative, and regulatory actions. Economic importance, resource allocation, technical feasibility, and public opinion will be discussed.

**Prereq.:** ENST 6900 and ENST 5830 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. 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 has extensive computing facilities that include microcomputers, workstations, mainframe, and access to supercomputers.

## Admission Requirements

In addition to the minimum College of Graduate Studies admission requirements, students must also have the following:

COURSE	TITLE	S.H.
A cumulative undergraduate cumulative grade point average of at least 3.0 (on a 4.0 scale) in all undergraduate mathematics and statistics courses.		
A completed sequence in standard calculus comparable to:		
MATH 1571	Calculus 1	4
MATH 1572	Calculus 2	4
MATH 2673	Calculus 3	4
Previous courses in discrete structures and linear algebra comparable to:		
MATH 3715	Discrete Mathematics	3
MATH 3720	Linear Algebra and Matrix Theory	3
Previous course in abstract algebra comparable to:		
MATH 5821	Topics in Abstract Algebra	4
MATH 5851	Topics in Analysis	4
The Graduate Record Examination		

GRE requirement may be waived for students who have completed at least 9 hours of graduate coursework with an average GPA of 3.0

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.

## Graduate Faculty

**Guang-Hwa (Andy) Chang**, Ph.D., Professor  
Biostatistics

**Richard G. Goldthwait**, Ph.D., Assistant Professor  
Math education

**Jozsi Z. Jalics**, Ph.D., Associate 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., Assistant Professor  
Simultaneous confidence bands; minimum effective doses; benchmark dose methodology

**Thomas L. Madsen**, Ph.D., Assistant Professor  
Abstract algebra; group theory; representation theory

**Nguyet Thi Nguyen**, Ph.D., Assistant 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., Associate Professor  
Mathematical biology; agent-based modeling

**Stephen Rodabaugh**, Ph.D., Professor  
Foundations of topology and fuzzy logic: point-set, lattice-theoretic, and categorical methods

**Thomas Smotzer**, Ph.D., Professor  
Real analysis; measure theory; operator theory

**Jamal K. Tartir**, Ph.D., Professor  
Set-theoretic topology

**Thomas P. Wakefield**, Ph.D., Professor, Chair  
Character theory; actuarial science

**Eric J. Wingler**, Ph.D., Professor  
Real analysis; complex analysis; operator theory

**George Yates**, Ph.D., Professor  
Applied mathematics; partial differential equations; mathematical biology; nonlinear waves

- A minimum of 33 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. These courses are not included in the 33-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 (taken in the earliest available semester)	4
MATH 5851	Topics in Analysis (taken in the earliest available semester)	4
MATH 5825	Advanced Linear Algebra	3
MATH 5852	Real Analysis 2	3
MATH 6996	Mathematical Project	1-3

- 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 5852, Math 5825 and the first course in the student's chosen course sequence
  - 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 17 hours of the student's approved program must be at the 6900 level. In addition to completing the courses which make up the mathematics core, students must complete at least one course sequence for depth and at least fifteen additional hours of elective courses to satisfy the breadth requirement for the degree. The course groupings are described below.
- 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.

## Course Sequences for Depth

The description of the recommended course sequences for depth will refer to the following list. The sequences offered depend upon student interest.

COURSE	TITLE	S.H.
Abstract Algebra		
MATH 6922	Advanced Topics in Group and Ring Theory	3
MATH 6923	Advanced Topics in Field Theory	3
Actuarial Mathematics		
STAT 6988	Modeling in Financial Economics	3
STAT 5802	Theory of Interest	3
Advanced Data Analysis		
STAT 6940	Advanced Data Analysis	3
STAT 6948	Linear Models	3
Differential Equations		
MATH 6955	Advanced Differential Equations	3
MATH 6957	Partial Differential Equations	3
Mathematical Statistics		
STAT 6943	Mathematical Statistics 1	3
STAT 6944	Mathematical Statistics 2	3
Operations Research		
MATH 5845	Operations Research	3
MATH 6942	Advanced Operations Research	3
Topology		
MATH 6980	Topology 1	3
MATH 6981	Topology 2	3

## Predocutorial Studies in Mathematics and Applied Mathematics

COURSE	TITLE	S.H.
MATH 6922	Advanced Topics in Group and Ring Theory	3
MATH 6923	Advanced Topics in Field Theory	3
MATH 6975	Complex Analysis 1	3
MATH 5852	Real Analysis 2	3
MATH 6980	Topology 1	3
STAT 6940	Advanced Data Analysis	3
MATH 6955	Advanced Differential Equations	3
STAT 6943	Mathematical Statistics 1	3
MATH 5861	Numerical Analysis 2	3
MATH 5845	Operations Research	3

### Electives

Select two or more sequences in areas of interest

## Statistics

COURSE	TITLE	S.H.
Core Requirements		
STAT 6940	Advanced Data Analysis	3
STAT 6948	Linear Models	3
STAT 6943	Mathematical Statistics 1	3
STAT 6944	Mathematical Statistics 2	3

**Electives**

Select 9 additional hours of statistics courses.	9
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**Actuarial Science**

<b>COURSE</b>	<b>TITLE</b>	<b>S.H.</b>
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**Core Requirements**

STAT 5802	Theory of Interest	3
STAT 6943	Mathematical Statistics 1	3
STAT 6944	Mathematical Statistics 2	3

**Electives**

Select from statistic and actuarial science course offerings
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**Applied Mathematics**

<b>COURSE</b>	<b>TITLE</b>	<b>S.H.</b>
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**Core Requirements**

STAT 6940	Advanced Data Analysis	3
MATH 6955	Advanced Differential Equations	3
STAT 6943	Mathematical Statistics 1	3
MATH 5861	Numerical Analysis 2	3
MATH 5845	Operations Research	3

**Depth Requirement**

Select the second course in one of the sequence
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**Secondary/Community College Mathematics**

<b>COURSE</b>	<b>TITLE</b>	<b>S.H.</b>
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STAT 6943	Mathematical Statistics 1	3
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or

STAT 6940	Advanced Data Analysis	3
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MATH 6915	Mathematical Foundations	3
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Select one of the following:	3
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MATH 6922	Advanced Topics in Group and Ring Theory	3
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MATH 6923	Advanced Topics in Field Theory	3
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MATH 6975	Complex Analysis 1	3
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MATH 6965	Abstract Analysis 1	3
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MATH 6980	Topology 1	3
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MATH 6922	Advanced Topics in Group and Ring Theory	3
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MATH 6923	Advanced Topics in Field Theory	3
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Those students seeking certification should consult an advisor in the school of Education.
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**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 Department of Computer Science and Information Systems.

**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 a bachelor's and master's degree from the Department of Mathematics and Statistics. The courses chosen to count for both undergraduate and graduate coursework must be approved by the Graduate Executive Committee within the Department upon admission into the program. An additional six hours of graduate coursework can be completed as an undergraduate and used exclusively for graduate credit.

**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.:** MATH 3715 and MATH 3720.

**MATH 5825 Advanced Linear Algebra 3 s.h.**

A study of abstract vector spaces, linear transformations, duality, canonical forms, the spectral theorem, and inner product spaces.

**Prereq.:** MATH 3721.

**MATH 5828 Number Theory 3 s.h.**

A study of congruences, Diophantine equations, quadratic residues, special number theory functions, and selected applications.

**Prereq.:** MATH 3721.

**MATH 5835 Introduction to Combinatorics and Graph Theory 3 s.h.**

The pigeonhole principle; permutations, combinations, the binomial theorem; the inclusion-exclusion principle; recurrence relations; graphs and digraphs, paths and cycles, trees, bipartite graphs and matchings.

**Prereq.:** MATH 3715 and MATH 3720.

**MATH 5845 Operations Research 3 s.h.**

An introduction to operations research with emphasis on mathematical methods. Topics may include: linear programming, sensitivity analysis, duality theory, transportation problems, assignment problems, transshipment problems, and network problems.

**Prereq.:** MATH 3715 and MATH 3720.

**MATH 5851 Topics in Analysis 4 s.h.**

A course in analysis aimed at developing a broad understanding of the subject. Credit will not be given for both MATH 3751 and MATH 5851.

**Prereq.:** MATH 2673 or MATH 2686H and MATH 3720 and MATH 3715.

**MATH 5852 Real Analysis 2 3 s.h.**

Uniform convergence of sequences of functions and some consequences; functions on  $n$ -space: derivatives in vector spaces, mean value theorem, Taylor's formula, inverse mapping theorem, implicit mapping theorem.

**Prereq.:** MATH 3720 and MATH 3751 or equivalent.

**MATH 5860 Topics in Numerical Analysis 3 s.h.**

A course in numerical analysis aimed at developing a broad understanding of the subject. Credit will not be given for both MATH 3760 and MATH 5860.

**Prereq.:** MATH 3720 and CSIS 2610.

**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 2673 or MATH 2686H and MATH 3760 or equivalent.

**MATH 5875 Complex Variables 3 s.h.**

Complex numbers and their geometric representation, analytic functions of a complex variable, contour integration, Taylor and Laurent series, residues and poles, conformal mapping.

**Prereq.:** MATH 3751 or equivalent.

**MATH 5895 Selected Topics in Mathematics 2-3 s.h.**

The study of a standard mathematical topic in depth or the development of a special area of mathematics. May be repeated twice.

**Prereq.:** 24 s.h. of mathematics applicable to the mathematics major including either MATH 3721 or MATH 3751.

**MATH 5895W Selected Topics in Mathematics Topology 2 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 5895X Selected Topics in Mathematics Rings and Fields 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.

**MATH 6901A Mathematics Workshop Leveraging Technology for ACT Success 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.

**MATH 6905 Teaching Practicum 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 lower-level mathematics courses, online tutorial services. Required of and limited to graduate assistants in the Department of Mathematics and Statistics. To be taken each semester 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 6924 Galois Theory 3 s.h.**

An introduction to Galois Theory with special emphasis on the Galois group, the Fundamental Theorem of Galois Theory, and radical extensions.

**Prereq.:** MATH 4823 or MATH 6923.

**MATH 6928 Advanced Number Theory 3 s.h.**

Advanced study of number theory: theory and distribution of primes, computational number theory, and additive number theory.

**Prereq.:** MATH 5828.

**MATH 6930 Differential Geometry 3 s.h.**

Classical differential geometry of curves and surfaces, differentiable manifolds with tensors.

**Prereq.:** MATH 5852.

**MATH 6942 Advanced Operations Research 3 s.h.**

Topics may include integer programming, advanced linear programming, nonlinear programming, dynamic programming, queuing theory, Markov analysis, game theory, and forecasting models.

**Prereq.:** MATH 5845 and STAT 3743 Probability and Statistics.

**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 5852 and either MATH 3705 or MATH 4855 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 6965 Abstract Analysis 1 3 s.h.**

Lebesgue integration and measure on the real line. General measure theory and functional analysis, including the Radon-Nikodym theorem, the Fubini theorem, the Hahn-Banach theorem, the closed graph and open mapping theorems, and weak topology.

**Prereq.:** MATH 5852 and either MATH 4880 or MATH 6915 or permission of graduate coordinator.

**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 5875 and MATH 6975.

**Prereq.:** MATH 3751 Real Analysis I, 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 6995M Special Topics Algebra for Teachers 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 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 lattice-valued (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 6965, MATH 6966, 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 6965, 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 6930, MATH 6965, MATH 6980, MATH 6981, MATH 6984, 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, student affairs and college counseling, 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 about the Department of Counseling, School Psychology and Educational Leadership contact the Department Office at 330-941-3257 or visit our Department website (<http://catalog.ysu.edu/undergraduate/colleges-programs/college-education/department-counseling-special-education-school-psychology>).

## 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, Student Affairs & College Counseling needs of Northeast Ohio, Western Pennsylvania and other areas of the state/country.

We are CACREP accredited and nationally awarded - 2015 ACES Outstanding Counselor Education Program Award and the 2014 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 45 year history and over 1500 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. I encourage you to review the website and to contact the program director with any questions.

Jake J. Protivnak, Ph.D.  
Chair / Professor

Department of Counseling, School Psychology and Educational Leadership  
(330) 941-1936  
jjprotivnak@ysu.edu

## Program Director

For specific questions about the Master of Science in Education Counseling program, please contact the program director:

Matthew Paylo, Ph.D., Associate Professor  
3312 Beeghly Hall  
(330) 941-3264  
mpaylo@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 currently accredited by the Council for the Accreditation of Counseling and Related Educational Programs (CACREP) under the 2009 standards for Community Counseling programs as a Community Counseling program. The CACREP 2009 standards provide a new CACREP specialty in Addiction Counseling. 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 currently accredited by the Council for the Accreditation of Counseling and Related Educational Programs (CACREP). A completed 600-hour internship in an appropriate community setting is required. Students interested in clinical mental health counseling complete a 63-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 currently 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 specialty portion of the Praxis Exam administered by Educational Testing Service for the State of Ohio or any other state required standardized testing. In addition to the 54 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.

## Student Affairs and College Counseling

The Student Affairs & College Counseling program option prepares entry level student affairs practitioners and college counselors with the knowledge, skills, and practical experiences to facilitate the learning and development of college students. Preparation is guided by an understanding of student affairs and college counseling 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 Student Affairs and College Counseling program is currently accredited by the Council for the Accreditation of Counseling and Related Educational Programs (CACREP). Graduates from the Student Affairs & College Counseling program option pursue careers as professionals at college and universities across the country. 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 66 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 66 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), and National Council for Accreditation of Teacher Education (NCATE). 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. Department programs have full approval by the Ohio Counselor, Social Worker, and Marriage and Family Therapists Board (OCSWMFT), and the Ohio Department of Education (ODE). The Department 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 2023. Our last site visit was December 4, 2014 and we will have our next campus visit prior to the date of our next accreditation review in 2023.

## 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, letters of recommendation, 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 Student Affairs/College Counseling. 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?
- Three Letters of Reference or Reference forms, at least two of which should be prepared by 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

**Kristin L. Bruns**, Ph.D., Assistant Professor

Student affairs; college counseling; suicide prevention; protective factors

**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

**Don Martin**, Ph.D., Professor

Academic and social skills among students of poverty; neuropsychology rehabilitation of stroke and CNS disorders; sports psychology with emphasis on D1 athletes

**Kenneth L. Miller**, Ph.D., Professor

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

**Matthew Paylo**, Ph.D., Associate Professor

Child and adolescent treatment; qualitative research; residential and prison mental health; advocacy and social justice issues

**Jake J. Protivnak**, Ph.D., Professor, Chair

Counselor education; supervision; adolescent/college student interventions

**Amy E. Williams**, Ph.D., Assistant Professor

Addiction counseling; quantitative research methodology; counseling theory

Students are required to complete appropriate coursework for their program option, including satisfactory completion of the counseling comprehensive examination prior to beginning their field placements. Coursework related to specialized cognate areas (e.g., electives and/or thesis) 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

1. 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*.
2. 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 accreditation.

COURSE	TITLE	S.H.
<b>Required Courses</b>		
COUN 5898	Orientation and Ethical Issues in Community Counseling (take within the first 3 semesters)	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 6910	Human Development and Family Systems Counseling	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 Group Counseling Laboratory	3
COUN 6976	Social and Cultural Issues in Counseling	3
COUN 6980	Diagnosis of Mental Disorders	3
COUN 7001	Counseling Practicum 1	3
COUN 7002	Clinical Mental Health Counseling Practicum 2	3
COUN 7031	Clinical Psychopathology and Treatment	3
COUN 7034	Advanced Evaluation of Mental and Emotional Status	3
COUN 7037	Counseling and Psychopharmacological Treatments of Mental and Emotional Disorders	3
or COUN 7003	Counseling Children and Adolescents	
COUN 7041	Case Conceptualization, Treatment Planning, and Clinical Supervision	3
<b>Internship</b>		
COUN 7010	Clinical Mental Health Counseling Internship	12
Total Semester Hours		66

### Comprehensive examination prerequisites

COURSE	TITLE	S.H.
COUN 5898	Orientation and Ethical Issues in Community Counseling	3
COUN 6900	Counseling Methods and Practice	3
COUN 6910	Human Development and Family Systems Counseling	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 Group Counseling Laboratory	3
COUN 6976	Social and Cultural Issues in Counseling	3
COUN 6980	Diagnosis of Mental Disorders	3

## Clinical Mental Health Counseling Program Curriculum

1. 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*.

2. 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.

COURSE	TITLE	S.H.
<b>Required Courses</b>		
COUN 5898	Orientation and Ethical Issues in Community Counseling (take within the first 3 semesters)	3
COUN 6900	Counseling Methods and Practice	3
COUN 6902	Theory and Foundation of Addictions Counseling	3
or COUN 6903	Addictions Counseling: Treatment and Intervention	
COUN 6910	Human Development and Family Systems Counseling	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 Group Counseling Laboratory	3
COUN 6976	Social and Cultural Issues in Counseling	3
COUN 6980	Diagnosis of Mental Disorders	3
or COUN 7013	Topical Seminar in Counseling	
COUN 7001	Counseling Practicum 1	3
COUN 7002	Clinical Mental Health Counseling Practicum 2	3
COUN 7031	Clinical Psychopathology and Treatment	3
COUN 7034	Advanced Evaluation of Mental and Emotional Status	3
COUN 7037	Counseling and Psychopharmacological Treatments of Mental and Emotional Disorders	3
or COUN 7003	Counseling Children and Adolescents	
COUN 7041	Case Conceptualization, Treatment Planning, and Clinical Supervision	3
<b>Internship</b>		
COUN 7010	Clinical Mental Health Counseling Internship	12
Total Semester Hours		63

### Comprehensive examination prerequisites

COURSE	TITLE	S.H.
COUN 5898	Orientation and Ethical Issues in Community Counseling	3
COUN 6900	Counseling Methods and Practice	3
COUN 6910	Human Development and Family Systems Counseling	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 Group Counseling Laboratory	3
COUN 6976	Social and Cultural Issues in Counseling	3
COUN 6980	Diagnosis of Mental Disorders	3

## School Counseling Program Curriculum

1. 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.
<b>Required Courses</b>		
COUN 6900	Counseling Methods and Practice	3
COUN 6910	Human Development and Family Systems Counseling	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 Group Counseling Laboratory	3
COUN 6976	Social and Cultural Issues in 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
<b>Internship</b>		
COUN 7010	Clinical Mental Health Counseling Internship	12
Total Semester Hours		54

### Comprehensive examination prerequisites

COURSE	TITLE	S.H.
COUN 6900	Counseling Methods and Practice	3
COUN 6910	Human Development and Family Systems Counseling	3
COUN 6961	Orientation and Ethical Issues in School Counseling	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 & 6973	Group Counseling Theory and Practice and Group Counseling Theory and Practice	4
COUN 6976	Social and Cultural Issues in Counseling	3

## Student Affairs and College Counseling Program Curriculum

1. Internship placement involves a minimum of 600 clock hours completed over two semesters. COUN 7004 Practicum in Student Affairs and College Counseling is to be completed in the fall semester 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. Students who fail to turn in their field placement application form by the deadline will not be allowed to

complete their field placement during the specified semester. Refer to *Fieldwork Handbook* for additional information.

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.

COURSE	TITLE	S.H.
<b>Required Courses</b>		
COUN 6900	Counseling Methods and Practice	3
COUN 6930	College Counseling and Student Mental Health	3
COUN 6962	Counseling Theory	3
COUN 6968	Research in Counseling	3
COUN 6972	Career Counseling	3
COUN 6973 & 6973L	Group Counseling Theory and Practice and Group Counseling Laboratory	3
COUN 6976	Social and Cultural Issues in Counseling	3
COUN 7021	Legal and Ethical Issues in Student Affairs <sup>2</sup>	3
COUN 7023	Life Span and 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	3
COUN 7046	Assessment in Student Affairs Practice	3
<b>Ohio Licensure Option <sup>2</sup></b>		
COUN 5898	Orientation and Ethical Issues in Community Counseling	
COUN 6980	Diagnosis of Mental Disorders	
COUN 7031	Clinical Psychopathology and Treatment	
COUN 7034	Advanced Evaluation of Mental and Emotional Status	
COUN 7041	Case Conceptualization, Treatment Planning, and Clinical Supervision	
COUN 7001	Counseling Practicum 1 (permit required)	
<b>Practicum/Internship</b>		
COUN 7004	Practicum in Student Affairs and College Counseling (permit required) <sup>1</sup>	3
COUN 7005	Internship in Student Affairs and College Counseling (permit required) <sup>1</sup>	6
COUN 7005	Internship in Student Affairs and College Counseling <sup>1</sup>	6
Total Semester Hours		51

<sup>1</sup> COUN 7004 Practicum in Student Affairs and College Counseling & COUN 7005 Internship in Student Affairs and College Counseling will have licensure and non-licensure track internship settings

<sup>2</sup> Ohio Licensure Option will include an additional 18 semester hours of listed coursework. COUN 7021 will not be required for Non-Licensure students.

### Comprehensive examination prerequisites

COURSE	TITLE	S.H.
COUN 7026	Orientation and Functions of Student Affairs	3
COUN 7023	Life Span and College Student Development	3
COUN 6900	Counseling Methods and Practice	3
COUN 6962	Counseling Theory	3
COUN 7046	Assessment in Student Affairs Practice	3
COUN 6968	Research in Counseling	3
COUN 6972	Career Counseling	3
COUN 6973 & 6973L	Group Counseling Theory and Practice and Group Counseling Laboratory	3
COUN 6976	Social and Cultural Issues in Counseling	3

## Learning Outcomes

1. Students will demonstrate an understanding of the curriculum content of CACREP's eight core courses
2. Students will demonstrate the ability to use foundational counseling techniques/ micro-skills
3. Students will demonstrate knowledge of, and the ability to apply ethical standards and engage in ethical counseling and professional practices
4. Students will demonstrate knowledge of, and skills related to counseling diverse populations
5. Demonstrate a professional identity, as well as professionalism, and fitness to practice as a professional counselor
6. Students will demonstrate knowledge and skills specific to their program areas (i.e., Clinical Mental Health, School, Student Affairs)

## Graduate Faculty

### **COUN 5821 Seminar in Guidance and Counseling 1-3 s.h.**

Study of selected topics chosen by staff, e.g. career guidance, counseling process, and other contemporary issues in school personnel work.

**Prereq.:** Upper-division standing.

### **COUN 5822 Seminar in Guidance and Counseling 1-3 s.h.**

Study of selected topics chosen by staff, e.g. career guidance, counseling process, and other contemporary issues in school personnel work.

**Prereq.:** Upper-division standing.

### **COUN 5823 Career Education and Career Guidance 2 s.h.**

Study of public school career education and career guidance programs; the career education continuum, legislation relating to vocational programs, historical development, and principles of vocational education and vocational guidance. Also a survey of economic services: distributive education, human resources, programs, and placement.

**Prereq.:** Upper-division standing.

### **COUN 5825 Group Processes in the School 2 s.h.**

An introduction to group activities applicable to the needs of students in the school setting. Includes the study of group processes and group dynamics for social and personal problem solving as well as in the general area of individual and group behavior. Also a study of programs that provide for counselor-teacher cooperation in the development of groups in the classroom.

**Prereq.:** Upper-division standing.

### **COUN 5879 Talented Students and Their Families 3 s.h.**

A study of consulting and referral practices related to the developmental, social and personal difficulties often experienced by gifted/talented students and their families. Includes a field study component.

**Prereq.:** Upper-division standing.

### **COUN 5888 Introduction to Health and Wellness Counseling 3 s.h.**

Provides an introduction to basic counseling principles with special focus on those factors encountered in the provision of health and wellness-related services.

**Prereq.:** Upper-division standing.

### **COUN 5895 Counseling Workshop 1-3 s.h.**

Selected topics related to prevention and intervention approaches in school and community settings. Designed primarily as continuing professional education, this course is not included in counseling degree programs.

**Prereq.:** Upper-division standing.

### **COUN 5898 Orientation and Ethical Issues in Community Counseling 3 s.h.**

This course provides students with an introduction to the field of professional counseling and the foundations of community counseling. The course addresses the following topics: history, philosophy, cultural dynamics, advocacy, consultation, technology applications, and trends in professional and community counseling. The counseling profession's ethical standards are also addressed with an emphasis on the ACA code of ethics and counselor ethical decision making processes. Requirements differ for undergraduate and graduate students.

### **COUN 5965 Counseling Workshop 1-5 s.h.**

A workshop designed to examine contemporary topics in the field.

### **COUN 5967 Guidance Counseling Workshop 1-3 s.h.**

A workshop designed to examine contemporary topics in the field.

### **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.

**Prereq. or concurrently:** COUN 6962.

### **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](http://www.platw.org)).

### **COUN 6912 Multilevel Tier Interventions Across General Education and Special Education Programming 3 s.h.**

Direct experiences in planned multilevel interventions across the three tiers of services within educational school systems for regular education and children with disabilities. Participation in RTI team meetings, curriculum academic and applied and functional behavioral analysis, progress monitoring, goal attainment scaling and determining effectiveness of intervention plans will be introduced.

### **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 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.

**Prereq. or concurrently:** COUN 6962.

**COUN 6973L Group Counseling Laboratory 1 s.h.**

Supervised experience in the use of interventions appropriate to stages of group development. Emphasis will be placed on promoting self-awareness, interpersonal skills, and group skills and techniques. Laboratory is taken concurrently with COUN 6973.

**COUN 6974 Case Studies in School Guidance and Field Experience in Community Social Agencies 2-4 s.h.**

Methods of collecting data, synthesis, and interpretation of data about a person and relationship to environment. Real and assumed situations of pupils over an extended period of time are presented for study and analysis. The course includes practical field experience with various community social agencies to acquaint the student with agency services and social casework methods. Particular emphasis is placed on the disadvantaged and exceptional child.

**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 3 s.h.**

Systems theory as applied to family functioning. Major theoretical approaches to family counseling, including ethics and techniques, will be addressed.

**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. Special approval required.

**Prereq.:** COUN 5898 or COUN 6961, COUN 6900, COUN 6962, COUN 6973 (can be taken concurrently), COUN 6980 (required for clinical counseling students only).

**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 and College Counseling 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. Special approval required.

**COUN 7005 Internship in Student Affairs and College Counseling 6 s.h.**

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. Special Approval required.

**Prereq.:** COUN 6900, COUN 6962, COUN 7004, and COUN 7026.

**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 6 s.h.**

Supervised internship in approved school counseling programs. May be repeated. For counseling majors. Special Approval required.

**Prereq.:** COUN 7002.

**COUN 7010 Clinical Mental Health Counseling Internship 6 s.h.**

Supervised internship in approved community agencies offering counseling and other mental health services. May be repeated. For counseling majors. Special Approval required.

**Prereq.:** COUN 7002.

**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 7017 Group Procedures in Counseling 2 s.h.**

A laboratory course intended as an experimental introduction to dynamics of groups. Students will participate in community experiences involving the entire class as well as small group activities involving subdivisions of the class.

Readings on group processes and involvement in relevant projects and reports are also included in the course.

**Prereq.:** Permission of instructor.

**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 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 Life Span and 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.

**Prereq.:** 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 Supervision Practicum 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 concurrent:** 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 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 7050 College Counseling Internship 3 s.h.**

Supervised experience in a college counseling clinic/center offering diagnosis and treatment of mental and emotional disorders. For counseling majors or by permission of program area internship coordinator.

**Prereq.:** COUN 7010.

**COUN 7060 Thesis Research 1-6 s.h.**

Design, proposal, completion, and reporting of scholarly research deemed acceptable by the department faculty. For counseling majors or by permission of Department of Counseling.

**Prereq.:** COUN 6964, COUN 6968, or permission of department chair.

**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 Director

Dr. Charles Vergon  
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### Program Description

The Educational Administration program prepares reflective administrative practitioners who are capable of providing effective management and instructional leadership in public and nonpublic school settings (also see the Doctor of Education in Educational Leadership section.) Post-master's programs are also provided which lead 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:

- Qualification for a teaching certificate or license (Ohio provisional or equivalent) if enrolled in a program leading to additional certification, licensure, validation, or endorsement. Students without a teaching certificate or license may be admitted on an individual basis to graduate programs leading to certification or licensure in certain areas.

- A satisfactory score on the aptitude portion of the Graduate Record Examination or on the Miller Analogies Test if the student’s undergraduate grade point average is below 3.0
- One reference letter from the applicant’s principal, superintendent or other administrator to evaluate your professional knowledge, skills, professionalism and leadership potential
- Two professional recommendations
- Professional résumé
- A brief essay (500-750 words) addressing why you aspire to be a principal or building level leader and why you think you will be an effective one
- Personal interview upon departmental request

## Graduate Faculty

**Jane Beese**, Ed.D., Associate 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., Associate Professor  
Assessment; research design and methodology; statistics

**Charles B. Vergon**, J.D., Professor  
Education law; policy development; educational change

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.
<b>Foundations</b>		
FOUN 6904	Introduction to Educational Research	6
FOUN 6902	Sociological Bases of Education	
<b>Leadership Courses</b>		
EDAD 6915	Learning, Teaching, and Instructional Leadership	12
EDAD 6933	Educational Policy, Politics, and Change	
EDAD 6947	School Building Leadership: Models and Processes	
EDAD 7014	Systematic Use of Information for Continuous School Improvement	
<b>Administrative Specialty Courses</b>		
EDAD 6949	Legal and Ethical Issues in Public Administration	12
EDAD 6952	School Finance, Resource Planning, and Management	
EDAD 6954	Educational Marketing and Community Relationships	

EDAD 7018 School Discipline and Student Support Services: Policies, Programs, and Prevention Strategies

Total Semester Hours 30

## Special Notes

Before granting the degree, candidates must successfully complete a comprehensive examination covering leadership and administrative specialty courses.

This program provides no license in administrative areas. Upon completion of the M.S. in Education in Educational Administration degree or the equivalent thereof as evaluated by the Department, students have the opportunity to enroll in specific administrative licensure areas.<sup>1</sup>

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 Educational Foundations, Research, Technology, and Leadership at YSU before the M.S. in Education in Educational Administration will be granted.

<sup>1</sup> 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 Ohio administrative license must have completed the 30 semester hours for the M.S. in Education degree in Educational Administration as required by YSU or its equivalent as evaluated by the Department of Educational Foundations, Research, Technology, and Leadership.

### 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 course work is entirely clinical in nature, consisting of two courses comprising 6 semester hours. The courses are designed to afford candidates the opportunity to apply the content knowledge from their course work and practice the skills necessary to effective leadership. Across the two 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, in the second clinical practice 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 6975	Introduction to Administration Clinical Experience	3
EDAD 7022	Field Experience (Elementary 7022E; Middle 7022M; or Secondary 7022S)	3

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; and have two years of

successful teaching under a professional teaching license at the same level as the administrative license being sought. In addition, candidates must have a passing score on the state-prescribed administrative licensure exam for the principalship.

## 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 6922	Principles of Instruction	3
TCED 6934	Assessment and Accountability	3
TCED 6936	Curriculum, Assessment, and Instruction to Improve Learning	3
SPED 6900	Issues, Trends & Foundations in Special Education	3
SPED 7077	Leadership in Special Education	3
EDAD 7014	Systematic Use of Information for Continuous School Improvement	3
EDAD 7018	School Discipline and Student Support Services: Policies, Programs, and Prevention Strategies	3
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 Leadership: Models and Processes	3
EDAD 6949	Legal and Ethical Issues in Public Administration	3
EDAD 6952	School Finance, Resource Planning, and Management	3
EDAD 6954	Educational Marketing and Community Relationships	3
EDAD 6955	Professional Development and Human Resources	3
EDAD 6975	Introduction to Administration Clinical Experience	3
EDAD 7014	Systematic Use of Information for Continuous School Improvement	3
EDAD 7018	School Discipline and Student Support Services: Policies, Programs, and Prevention Strategies	3
EDAD 7040	Clinical Practice for the Administrative Specialist	3
Total Semester Hours		30

Individuals qualifying for licensure at the Elementary or Secondary level are also issued licensure at the Middle School level.

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 Educational Foundations, Research, Technology, and Leadership at YSU, complete the following course sequence, and meet any other Ohio State Department of Education requirements.

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 at Leadership	3
EDAD 7050	Clinical Experience: Superintendency	3
Total Semester Hours		15

## 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 33 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:

- a score of at least 143 on Praxis II Specialty Test #0411 in Educational Leadership: Administration and Supervision; or
- a 163 score on Praxis Specialty Test #6011 in School Leadership Licensure Assessment (SLLA); and
- satisfy any other Pennsylvania Department of Education Requirements, plus:

Completion of 33 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 6931	Leadership in Educational Organizations: Theory to Best Practices	3
EDAD 6947	School Building Leadership: Models and Processes	3
EDAD 6949	Legal and Ethical Issues in Public Administration	3
EDAD 6952	School Finance, Resource Planning, and Management	3
EDAD 6954	Educational Marketing and Community Relationships	3
EDAD 6955	Professional Development and Human Resources	3
EDAD 7014	Systematic Use of Information for Continuous School Improvement	3
TCED 6936	Curriculum, Assessment, and Instruction to Improve Learning	3
SPED 7077	Leadership in Special Education	3
Select one clinical experience course as appropriate to the licensure level being sought:		
EDAD 7022	Field Experience (Elementary 7022E; Secondary 7022S)	3
Total Semester Hours		33

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.
2. 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.

3. 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.

4. Candidates will be able to collaborate with families and other community members, respond to diverse community interests and needs, and mobilize community resources.
5. Candidates will be able to act with integrity, fairly, and in an ethical manner in carrying out building level functions.
6. Candidates will be able to influence the larger political, social, economic, legal, and cultural context.
7. Candidates will be able to synthesize and apply the above outcomes through substantial, sustained, standards-based work in real school building settings in their choice of post-master's licensure programs- Ohio Administrative Specialist Licensure, Ohio Principal Licensure and Pennsylvania Principal Certification.

## Certification for the Pennsylvania Superintendent's Letter of Eligibility

Candidates must:

- hold a Master's degree from an accredited program;
- 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 score of at least 160 on the School Superintendent Assessment Exam #6021;
- all other State of Pennsylvania Department of Education requirements must be met;
- plus completion of the 57 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 6915	Learning, Teaching, and Instructional Leadership	3
EDAD 6947	School Building Leadership: Models and Processes	3
EDAD 6949	Legal and Ethical Issues in Public Administration	3
EDAD 6952	School Finance, Resource Planning, and Management	3
EDAD 6954	Educational Marketing and Community Relationships	3
EDAD 6955	Professional Development and Human Resources	3
EDAD 7014	Systematic Use of Information for Continuous School Improvement	3
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	3
EDAD 7050	Clinical Experience: Superintendency	3
FOUN 6901	Philosophical Analysis of Education	3
FOUN 6902	Sociological Bases of Education	3
FOUN 6904	Introduction to Educational Research	3
FOUN 6905	Educational Challenges in Historical Perspective	3
TCED 6936	Curriculum, Assessment, and Instruction to Improve Learning	3
TCED 6946	Supervision of Instruction	3
TCED 6951	Interpersonal Communications for Educators	3
Total Semester Hours		57

## Learning Outcomes

1. Candidates will be able to facilitate the development, articulation, implementation, and stewardship of a building level vision of learning that is supported by the school community.
2. Candidates will be able to promote a positive school building culture, provide an effective instructional program, apply best practice to student learning, and design comprehensive professional growth plans for building staff.
3. Candidates will be able to manage school building organization, operations, and resources in a way that promotes a safe, efficient, and effective learning environment.

## Graduate Courses

**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 6931 Leadership in Educational Organizations: Theory to Best Practices 3 s.h.**  
Significant theories, research, and professional practices in the leadership of schools and school systems. Detailed analysis of primary sources and application of sources to reflection on issues and problems of administrative practice.

**EDAD 6933 Educational Policy, Politics, and Change 3 s.h.**  
Explores who governs America's schools. Provides an introduction to schools as political systems and the values that shape educational politics and policy making. Examines the role of school leaders as agents of change and alternative change models and strategies.

**EDAD 6947 School Building Leadership: Models and Processes 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 6949 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.

**EDAD 6952 School Finance, Resource Planning, and Management 3 s.h.**  
An analysis of school funding on a state and local level. School budgeting, site-based management, and school business practice are major topics. An action research project is part of the course requirement.

**EDAD 6954 Educational Marketing and Community Relationships 3 s.h.**  
Stresses effective communication that supports the marketing of school purposes and programs. Leadership skills that build community support and recognize the value of message delivery to targeted audiences in the community will be related to the marketing of schools.

**EDAD 6955 Professional Development and Human Resources 3 s.h.**  
In-depth examination of policies and practices designed to reconcile the interests of schools and the people who make them up. Topics include professional and staff development, equal employment, position description, recruitment, selection, performance appraisal, removal, compensation, and emerging issues.



**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 6982 Independent Study/Action Research 1-3 s.h.**

Individual investigation of advanced topics under the guidance of selected departmental faculty. May be repeated.

**EDAD 6990 Seminar in Educational Administration 1-3 s.h.**

A seminar designed for the development of particular skills and/or perspectives on a topic related to educational administration.

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

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

**EDAD 6995 Workshop in Educational Administration 1-3 s.h.**

A workshop designed for the development of particular skills and/or perspectives on a topic related to educational administration.

**EDAD 7014 Systematic Use of Information for Continuous School Improvement 3 s.h.**

Information systems concepts: analysis, design, implementation, and evaluation applied to individual, school, and program evaluation and improvement. Experience with information retrieval and synthesis from local and state educational databases. An action research project is a major course requirement.

**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 7022 Field Experience 3 s.h.**

Completed in a school covered by teaching certificate or license. Second administrative clinical experience designed to highlight tasks.

**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.

**Prereq.:** Candidates must have completed all or be currently enrolled in remaining courses that compose the requirement of respective specialist license.

**EDAD 7050 Clinical Experience: Superintendency 3 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 three of the following four courses: EDAD 7024, EDAD 7025, EDAD 7026, EDAD 7035, and two years experience in a building-level administrative capacity or equivalent.

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

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. 3 s.h. Cross listed with FOUN 8111.

**Prereq.:** EDAD/FOUN 8104.

**EDAD 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 with** FOUN 8113.

**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 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 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 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 8185 Seminar in Educational Research/Dissertation Proposal 3 s.h.**

The purpose of this course is to gain knowledge and skills in developing a research question and an appropriate methodology so that chapters I and II of a doctoral dissertation can be completed.

**Prereq.:** FOUN 8104, FOUN 8112, and FOUN 8111.

**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 8931 Leadership in Educational Organizations 3 s.h.**

Significant theories, research, and professional practices in the leadership of schools and school systems. Detailed analysis of primary sources and application of sources to reflection on issues and problems of administrative practice.D. program in Educational Leadership. Ed.D. students who have not taken EDAD 6931 are required to complete EDAD 8931 and include a supplemental, substantive course assignment that relates to their intended area of specialization.

**Prereq.:** Admission to the Ed.

**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 (<http://catalog.yzu.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 chair:

Marcia Matanin, PhD  
2321 Beeghly College of Education  
(330) 941-3652  
[mjmatanin@ysu.edu](mailto:mjmatanin@ysu.edu) ([jvaschak01@ysu.edu](mailto:jvaschak01@ysu.edu))

## Mission

The Special Education Program supports the mission of both Youngstown State University and the Beeghly College of 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 through 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). Our last campus visit was March 20-24, 2010. Our next campus visit is scheduled for April 2, 2017. To contact our accreditation body, please go to: [www.caepnet.org](http://www.caepnet.org).

Both the Intervention Specialist Mild/Moderate Disabilities and the Autism & Related Disabilities Option (Moderate/Intensive Disabilities) Program) Special Education Graduate Programs have received full recognition from the Council for Exceptional Children (CEC) <https://www.cec.sped.org>.

## Graduate Faculty

**Margaret L. Briley**, Ph.D., Assistant Professor  
Deafblind; low incidence disabilities; autism with a focus on communication and social interaction

**Marcia Matanin**, Ph.D., Professor, Chair  
Assessment of student learning; program assessment; clinical partnerships

## Graduate Courses

### **SPED 5810 Introduction to Sign Language 3 s.h.**

Deaf Culture, ASL, and English Sign Language differences will be discussed. Students will acquire basic proficiency in sign language.

**Prereq.:** Special approval.

### **SPED 5828 Education for Children and Youth with Emotional and Behavior Needs 4 s.h.**

Instruction, curriculum and program development for youth who are identified with emotional disturbance and as a result are often in conflict with educational and social systems. Successful completion of 30-hour field experience is required.

**Prereq.:** BCOE upper-division status.

### **SPED 5833 Characteristics and Needs of Exceptional Children and Youth with Moderate/Intensive Disabilities 3 s.h.**

Identification and intervention in critical areas of development for individuals with moderate/intensive disabilities including autism. Developing objectives, planning and implementing adapted curriculum in consultation with interdisciplinary specialists.

**Prereq.:** Upper-division status in COE, SPED 3715.

### **SPED 5834 Educational Strategies and Methods for Children and Youth with Moderate/Intensive Disabilities 4 s.h.**

Curriculum planning, teaching methods, habilitation and rehabilitation for persons with multiple and/or severe developmental disabilities. Practicum included.

**Prereq.:** Upper-division status in COE, SPED 5833.

### **SPED 5835 Classroom Management for Exceptional Children and Youth 4 s.h.**

Development, implementation and evaluation of behavior management plans and strategies for students with exceptionalities in the classroom environment. Behavior management techniques to facilitate learning, self-management, and the development of social skills. Communicating effective management programs to parents, caregivers, teachers, and stakeholders. Part of the STEM block (field requirement).

**Prereq.:** Upper-division status in BCOE and special approval.

### **SPED 5851 Transition Planning, Social Skill Development and Health-Related Issues 3 s.h.**

Emphasis on lifelong career orientation and the development and implementation of a K-12 prevocational/vocational curriculum. Effective teaching of interpersonal communication and social skills. Classroom climate, self-esteem, health-related issues. Integration of practical experiences in the classroom, home, and community.

**Prereq.:** Upper-division status in COE.

### **SPED 5852 Prog Development Instructional Strategies for Learners with Moderate to Intensive Except Learn Needs 3 s.h.**

This course is designed to expand technical terminology and applied practices for candidates working towards licensure for students with moderate to intensive exceptional learning needs. Candidates will create individualized objectives, apply evidence-based practices, and report progress. Successful completion of a 30 hour field experience is required.

**Prereq.:** Admission to BCOE Upper Division, SPED 5834.

### **SPED 5853 Diagnosis and Intervention in Mathematics for Special Education 3 s.h.**

Principles, practices, materials and aids for teaching mathematics in special education. Diagnostic and evaluation procedures; individualized instructional techniques; observation, tutoring, and participation. Field experience required.

**Prereq.:** Upper-division status in COE.

### **SPED 5858 Intervention Concepts and Strategies in Early Childhood Special Education 2 s.h.**

Review and analysis of the methods by which young children construct knowledge about their physical, social and intellectual worlds. Study of patterns of normal and atypical development from birth through age eight, as well as the development of appropriate models for effective intervention.

**Prereq.:** PSYC 3755.

### **SPED 5864 Service Coordination, Collaboration, and Consultation for Students with Special Needs 3 s.h.**

Methods and strategies for the cooperation and involvement of related services professionals, parents, and children in the coordination of comprehensive educational and service plans. Collaboration, communication skills and sensitivity to individual and cultural differences are stressed. Part of the STEP block (field requirement).

**Prereq.:** Upper-division status in BCOE and special approval.

### **SPED 5865 Workshop in Special Education 1-4 s.h.**

Intensive study and related activities in one or more of the following special education curriculum areas: trainable mentally retarded, educable mentally retarded, learning disability/behavior disorder, multi-handicapped. May be repeated if content is different.

**Prereq.:** Admission to upper-division COE status.

### **SPED 5866 Assessment and Referral of Exceptional Children and Youth for the Intervention Specialist 3 s.h.**

Development of skills in referral and assessment techniques in the areas of mild/moderate and moderate/intensive disabilities. Informal and formal methods including observation, authentic assessments, standardized measures, interviewing. Referral, initial and subsequent evaluation, annual review concerns.

**Prereq.:** Upper-division status in COE.

### **SPED 5867 Intervention and Remediation of Receptive/Expressive Language Dysfunction 3 s.h.**

Theory and practice of intervention and remediation of basic cognitive processes especially in the areas of receptive and expressive language and cognitive skills for the intervention specialist.

**Prereq.:** Upper-division status in COE.

### **SPED 5868 Mild/Moderate Disabilities Practicum 4 s.h.**

Diagnostic procedures used to develop a comprehensive assessment of a child's current functioning. Individualized education program/case study developed and partially implemented.

**Prereq.:** Upper-division status in COE, SPED 5866 and SPED 5867.

### **SPED 5870 Independent Study in Special Education 1-4 s.h.**

Individual work under special education staff guidance; curriculum development or special education areas; individual problems in community agencies or school.

**Prereq.:** Admission to upper-division COE status.

### **SPED 5871 Characteristics and Needs of Gifted Children 3 s.h.**

Introduction to gifted education. Overview of the theoretical and research base for gifted education, including appropriate classroom environments, teacher qualifications, and support services to meet the diverse social, emotional, and intellectual needs of gifted children. Current program standards.

**Prereq.:** Admission to COE upper-division status.

### **SPED 5872 Assessment and Referral for Children and Youth with Exceptionalities for the Intervention Specialist 3 s.h.**

Development of skills in referral and assessment techniques for the special educator in the areas of moderate/intensive disabilities. Emphasis will be given to informal and formal methods such as observation, authentic assessment, alternate assessment, rubrics, inventories, interviewing, task analysis, functional behavioral analysis, curriculum based measurement, DIBELS/SWIS, and formal standardized measures.

**Prereq.:** Admission to BCOE Upper Division Status.

### **SPED 5873 Communication and Literacy Skills for Learners with Significant Disabilities 3 s.h.**

This course focuses on enhancing functional communication and literacy skills of students with severe disabilities. Assessment and strategies to increase communication form, function and literacy are covered. The course addresses aided and non-aided augmentative systems and alternative communication systems with an emphasis on using a multi-modality approach.

**Prereq.:** Admission to BCOE Upper Division Status.

**SPED 5878 Teaching Gifted and Talented Students 4 s.h.**

Theory and organization of curriculum with design and integration of content subjects into varying models. Wide range of strategies and identification of resources and materials as well as investigations in educational technology and appropriate applications for gifted children.

**Prereq.:** Upper division status in COE; SPED 5871 and permission of instructor.

**SPED 5965 Special Education Workshop 1-5 s.h.**

A workshop designed to examine contemporary topics in the field.

**SPED 6900 Issues, Trends & Foundations in Special Education 3 s.h.**

Exploratory study of the issues, trends, and foundations in special education. Evidence-based principles, laws and policies, diverse and historical points of view, and human issues that focus on the education of individuals with mild or intensive exceptional learning needs are examined. The relationship of special education to the organizations and functions of schools/agencies is explored.

**Prereq.:** Admission into the program and approval of the department chair.

**SPED 6901 System-Wide Consultation/Collaboration in the Schools 3 s.h.**

Current educational practices have made collaboration an essential way education professionals do their work. This course will cover the theoretical bases and consultation/collaboration skills necessary for affecting change in the educational environment from a system wide perspective. The aim of this course is to prepare Intervention Services students to function as collaborative consultants promoting systematic and planned strategies for use within the public schools and with families with children with disabilities.

**SPED 6905 Cultural/Ethnic Issues Relating to Youth and Families 3 s.h.**

Introduces pertinent theoretical cultural issues which relate to mental health professionals as they work with diversified populations. In particular, therapeutic skill enhancement of professionals will be advanced, since all counseling may be seen as cross-cultural. Group work and experiential exercises will provide an avenue for the professional and personal cultural growth of each participant. The goal is to also enhance participant's level of cultural sensitivity.

**SPED 6906 Characteristics and Behaviors of Learners with Mild/Moderate and Moderate/Intensive Exceptional Learning Needs 3 s.h.**

Course focuses on federal and state laws and initiatives that influence the operations and decisions of educational opportunities for students with mild/severe disabilities. Topics include categories of disabilities, current trends and best practices for instruction and assessment. Also, recommended collaboration strategies for educators, administrators and families.

**Prereq.:** Successful completion or concurrent enrollment in SPED 6900.

**SPED 6907 Guidelines for Teaching Children Who are Deafblind With and Without Concomitant Disabilities 4 s.h.**

This course focuses on understanding and meeting the needs of children with multiple disabilities and/or concomitant conditions in addition to visual impairment in P-12 settings. In particular, this course will emphasize the needs of the child who has combined hearing-vision loss (i.e., deafblindness or dual sensory impairments). The additional concomitant conditions may include autism, traumatic brain injury, intellectual disability, orthopedic impairments, and/or the impact of various syndromes. There is a supervised 30 field experience associated with the course.

**SPED 6908 Practicum in Visual Impairment 2 s.h.**

This course represents the clinical practice/practicum portion of the EDVI program. Fifty hours of practicum experience will take place in a variety of instructional and age/grade level setting serving children with VI.

**Prereq.:** SPED 6907.

**SPED 6909 Assessment and Intervention for Students with Low Incidence Disabilities 3 s.h.**

Emphasis will be on current most effective practices of the professional collaboration process across three tiers of service to include specific models and strategies for students in general education and especially those with autism and/or a low incidence disability. Candidates will develop a team training model and will evaluate evidence-based practices.

**SPED 6911 International Area Study: Project Learning Around the World 3 s.h.**

This course is designed to enhance mental health or teacher's professional and personal level of sensitivity and competence via introducing them to innovative and traditional forms of intervention or healing in community and school settings in a developing country. Students will participate in philanthropic activities by helping to gather and deliver educational supplies via Project Learning Around the World ([www.platw.org](http://www.platw.org)).

**SPED 6912 Multilevel Tier Interventions Across General Education and Special Education Programming 3 s.h.**

Direct experiences in planned multilevel interventions across the three tiers of services within educational school systems for regular education and children with disabilities. Participation in RTI team meetings, curriculum academic and applied and functional behavioral analysis, progress monitoring, goal attainment scaling and determining effectiveness of intervention plans will be introduced.

**SPED 6914 Behavior Management for Educators 3 s.h.**

Classroom application consistent with the study of behavior management with a focus on ethical strategies and implementation of intervention techniques for learners with mild/intensive exceptional learning needs. Successful completion of a 30-hour field experience is required.

**Prereq.:** Successful completion of SPED 6906 or concurrent enrollment in SPED 6906.

**SPED 6915 Classroom Management and Crisis Intervention for Learners with Severe Emotional and Behavior Disorders 3 s.h.**

Behavior analysis, behavior management, instruction, curriculum and program development for youth with severe emotional and/or behavior disorders. Advanced behavior change interventions and a practicum consisting of work in the field with emotionally and/or behaviorally disturbed youth required.

**Prereq.:** Successful completion of SPED 6909.

**SPED 6927 Curriculum Design, Adaptations and Resources for Learners with Mild/Moderate Exceptional Learning Needs 3 s.h.**

Knowledge of curriculum terminology approaches and models, content, and design to provide and enhance access to the general curriculum for students with exceptional learning needs. Course focuses on the skills to select and implement curricular adaptations for learners with exceptional learning needs within the general education classroom.

**Prereq.:** Successful completion of SPED 6906.

**SPED 6928 Transition and Life Skill Supports for Learners with Moderate/Intensive Exceptional Learning Needs 3 s.h.**

Course focuses on best practices of the professional collaboration process with regard to the transition process for students with moderate/intensive exceptional learning needs. Learner's individual strengths and characteristics will be considered to facilitate social, vocational and daily living skills for all learners. Successful completion of a two-hour field experience is required.

**Prereq.:** Successful completion of SPED 6906.

**SPED 6929 Assessment of Gifted and Exceptional Learners 3 s.h.**

Course focuses on the educational assessment process as it applies to exceptionalities (learners with disabilities as well as gifts and talents). Topics include a review of state and federal regulations, data collection techniques including both formal and informal methods, appropriate test preparation and interpretation, design of identification and placement procedures.

**Prereq.:** Successful completion of SPED 6906.

**SPED 6930 Instructional Methodologies for Learners with Mild/Moderate and Moderate/Intensive Exceptional Learning Needs 4 s.h.**

This course is designed to provide candidate with the opportunity to research, study, apply and analyze instructional strategies and delivery systems in the four major content areas. The candidates will use the referenced strategies to both support and promote single subject and cross-curricular high quality instruction for candidates with special needs.

**Prereq.:** Successful completion of SPED 6914, SPED 6927, SPED 6928, SPED 6929.



**SPED 6931 Clinical Experience-Learners with Exceptional Learning Needs 1 3 s.h.**

Supervised clinical experience incorporation theory, planning and implementation of services for students with mild/moderate learning needs. Weekly seminars will connect theory to practice.

**Prereq.:** SPED 6906, SPED 6927, SPED 6928, SPED 6929, SPED 6930 or taken concurrently with SPED 6930 and passage of state licensure exam.

**SPED 6932 Clinical Experience-Learners with Exceptional Learning Needs 2 3 s.h.**

Supervised clinical experience incorporation theory, planning and implementation of services for students with mild/moderate learning needs. Weekly seminars will connect theory to practice.

**Prereq.:** SPED 6906, SPED 6927, SPED 6928, SPED 6929, SPED 6930, SPED 6931 and passage of state licensure exam.

**SPED 6965 Special Topics in Disabilities Education 1-4 s.h.**

Workshop will include information on various current topics appropriate to the education of students with disabilities. These include assessment, identification, and instructional processes.

**Prereq.:** PRAXIS passage.

**SPED 6980 Topical Seminar in Special Education 1-4 s.h.**

Selected topics in special education. May be repeated for different content.

**SPED 6981 Seminar in Special Education 3 s.h.**

This course details current issues in the field of special education involving research, pedagogy, methodologies, and application. Emphasis is on the intervention and remediation of receptive/expressive language dysfunctions, as well as other issues related to children and youth with disabilities.

**Prereq.:** SPED 6983.

**SPED 6982 Educational Assessment in Gifted and Special Education 3 s.h.**

The course focuses on the educational assessment process as it applies to students with exceptionalities. Topics include a review of state and federal regulations; data collection techniques, including both formal and informal methods; appropriate test preparation and interpretations; and design of identification and placement procedures.

**Prereq.:** SPED 5871.

**SPED 6984 Major Concepts and Program Design for Students in Special Education 3 s.h.**

Major concepts, program development, and program evaluation involving youth with special needs are parts of this course. Programs related to the transition process will be studied and reviewed.

**SPED 6986 Severe Behavior Disorders 3 s.h.**

A comprehensive analysis of programs and the description of the delivery of services to a wide range of seriously emotionally disturbed children and youth.

**Prereq.:** SPED 6906 or SPED 6983.

**SPED 6991 Referral and Assessment in Early Childhood Special Education 3 s.h.**

Intensive hands-on experience in referral and assessment of young children. Emphasis on philosophies and ethical considerations, as well as techniques, instruments, and the referral process. Participation within the assessment team with parents involved as equal partners in the multidisciplinary process. Written assessment reports are required based upon knowledge of child development and a variety of sources of input.

**Prereq.:** Admission to College of Education upper division; SPED 5858.

**SPED 6992 Teaching Methods in Early Childhood Special Education 3 s.h.**

Examines accepted curricular models in early childhood special education, as well as classroom management and motivation strategies as they relate to young children with special needs. Emphasizes the inclusion of parents in planning process. Students will learn to integrate curriculum with individual IEP/IFSP goals and objectives.

**Prereq.:** SPED 5858.

**SPED 6993 Health and Related Issues in Early Childhood Special Education 2 s.h.**

A study of curricular experiences focusing on those aspects of early childhood special education dealing with the instructional applications of technology and the use of adaptive equipment and related services as these relate to technologically dependent or chronically ill children.

**SPED 6994 Field Experiences in Early Childhood Special Education 4-8 s.h.**

Supervised field experiences incorporating theory, planning and implementation of services for young children with special needs.

**Prereq.:** SPED 5858, SPED 6991, SPED 6992, SPED 6993.

**SPED 6996 Teaching Strategies/Autism 4 s.h.**

Application of assessment, curriculum planning, preparation of materials and practice teaching methods for students with autism spectrum disorders and related disabilities. Methodology emphasizes most effective practices for instructing students who need academic and/or life skills curricula.

**Prereq.:** SPED 6914 or equivalent.

**SPED 6998 AAC Strategies 3 s.h.**

Assessment and application of methods to increase communication form, function, and literacy for individuals who need alternate and/or augmentative communication (AAC).

**Prereq.:** SPED 6996 and PSYC 6960 or PSYC 6990.

**SPED 6999 Field Experiences Autism/Related Disorders 3-6 s.h.**

Supervised clinical field experiences incorporating theory, planning, and implementation of services for children with autism spectrum disorders. Weekly seminars connect theory to practice. May be repeated once for a maximum of 6 s.h.

**Prereq.:** SPED 6996, SPED 6998, and PSYC 6960 or PSYC 6990.

**SPED 7021 Field Experience 1 3 s.h.**

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**SPED 7040 Field Experience in Gifted and Talented Education 2 s.h.**

Supervised field experience that incorporates theory, planning, and implementation of curriculum for gifted and talented students. Individual conferences and completion of contracted assignments.

**Prereq.:** SPED 5871, SPED 5878, SPED 6982, SPED 6983 and COUN 5879.

**SPED 7042 Professional Development for Classroom Teacher Educators 2 s.h.**

A restricted professional development course for classroom teacher educators invited to supervise the instructional program of student teachers and field experience students. The course concentrates on developing analytical observation, conferencing, evaluation, and supervision skills based on scientific knowledge and theoretical constructs.

**Prereq.:** Invitation from YSU and endorsement from home school district to serve as a classroom teacher educator.

**SPED 7043 Instructional Leadership in Special Education 3 s.h.**

Implementation, coordination, and evaluation of quality instructional programs for exceptional, at-risk, and other students experiencing learning problems. Administrative roles and strategies related to instructional leadership, school climate, collaborative decision making, and restructuring.

**Prereq.:** COUN 6961 and SPED 7977.

**SPED 7077 Leadership in Special Education 3 s.h.**

The course focuses on leadership, administration, and supervision of a broad range of programs and services for students with exceptionalities (students with disabilities). Topics include review of theoretical foundations, historical and sociological issues as these relate to education for special populations, as well as in-depth study of federal and state legal issues, differentiated programming and procedures, student identification and placement, individualized education plans, due process, least restrictive environment, and program monitoring and evaluation.

## Intervention Specialist Mild/ Moderate Disabilities

## 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 (<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 chair:

Marcia Matanin, PhD  
 2321 Beeghly College of Education  
 (330) 941-3652  
 mjmatanin@ysu.edu (jvaschak01@ysu.edu)

## Mission

The Special Education Program supports the mission of both Youngstown State University and the Beeghly College of 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 through 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). Our last campus visit was March 20-24, 2010. Our next campus visit is scheduled for April 2, 2017. To contact our accreditation body, please go to: [www.caepnet.org](http://www.caepnet.org).

Both the Intervention Specialist Mild/Moderate Disabilities and the Autism & Related Disabilities Option (Moderate/Intensive Disabilities) Program) Special Education Graduate Programs have received full recognition from the Council for Exceptional Children (CEC) <https://www.cec.sped.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 or PSYC 6903 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 before completion of the culminating clinical experience (SPED 6932).

COURSE	TITLE	S.H.
<b>Common Core</b>		
FOUN 6904	Introduction to Educational Research	3
SPED 6900	Issues, Trends & Foundations in Special Education	3
SPED 6906	Characteristics and Behaviors of Learners with Mild/Moderate and Moderate/Intensive Exceptional Le	3
SPED 6914	Behavior Management for Educators	3
SPED 6929	Assessment of Gifted and Exceptional Learners	3
<b>Intervention Specialist Option</b>		
SPED 6915	Classroom Management and Crisis Intervention for Learners with Severe Emotional and Behavior Disor	3
SPED 6927	Curriculum Design, Adaptations and Resources for Learners with Mild/Moderate Exceptional Learning	3
SPED 6928	Transition and Life Skill Supports for Learners with Moderate/Intensive Exceptional Learning Needs	3
SPED 6930	Instructional Methodologies for Learners with Mild/Moderate and Moderate/Intensive Exceptional Lea	4
SPED 6931	Clinical Experience-Learners with Exceptional Learning Needs 1	3
SPED 6932	Clinical Experience-Learners with Exceptional Learning Needs 2	3

SPED 6998	AAC Strategies	3
Total Semester Hours		37

## Learning Outcomes

1. Candidates will analyze learners to determine unique needs using the principles and theories of human development.
2. Candidates will prioritize areas of the general curriculum and accommodations for individuals with exceptional learning needs.
3. Candidates will individualize instruction to meet the unique learning, communication, social and behavior needs of students with exceptional learning needs.
4. Candidates will develop and use appropriate technology adaptations for all individuals with exceptional learning needs.
5. Candidates will demonstrate reinforcement-based classroom management interventions with students with exceptional learning needs.
6. Candidates will evaluate the progress of students with exceptional learning needs on their IEP goals to inform the adjustment of learning and behavior plans

## Admission Requirements

In addition to the minimum College of Graduate Studies admission requirements, all master's in special education applicants must have the following:

- 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.);
- Three Letters of Reference or Reference forms, at least two of which should be prepared by current or former faculty;
- Official transcripts of all undergraduate or graduate work completed;
- Letter of intent – Candidates must provide a one page response to each of the following:
  - What are the personal attributes that have prepared you for this profession?
  - What is the purpose of obtaining this degree?
- Special Education interview
- Application Deadline: July 15th. Students admitted once per year for fall semester.

To take classes as a non-degree candidate, the approval of the department chair must be obtained. Non-degree candidates choosing to earn a degree must make formal application for admission to the degree program. A GPA of 3.0 must be maintained in order to convert from non-degree to regular status.

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 3701), and passage of the appropriate PRAXIS exam is 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 3701), OAE APK exam (Special Education content) and Foundations of Reading tests, PSYC 3709 or PSYC 6903 or equivalent, 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 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 (<http://catalog.yzu.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 chair.

Marcia Matanin, PhD  
2321 Beeghly College of Education  
(330) 941-3652  
[mjmatanin@ysu.edu](mailto:mjmatanin@ysu.edu) ([jvaschak01@ysu.edu](mailto:jvaschak01@ysu.edu))

## Mission

The Special Education Program supports the mission of both Youngstown State University and the Beeghly College of 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 through 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.

SPED 6999	Field Experiences Autism/Related Disorders	3
Total Semester Hours		33

## Accreditation

The Master of Science - Special Education graduate degree program is accredited by the National Council Association of Teacher Education (NCATE). Our last campus visit was March 20-24, 2010. Our next campus visit is scheduled for April 2, 2017. To contact our accreditation body, please go to: [www.caepnet.org](http://www.caepnet.org).

Both the Intervention Specialist Mild/Moderate Disabilities and the Autism & Related Disabilities Option (Moderate/Intensive Disabilities) Program) Special Education Graduate Programs have received full recognition from the Council for Exceptional Children (CEC) <https://www.cec.sped.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 or PSYC 6903, 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 exam before completion of the clinical experience (SPED 6999).

A candidate for the program must meet all requirements for admission to the Graduate School as outlined in the YSU Graduate Bulletin. Candidates are responsible for adhering to all special education policies.

A new cohort of students will begin each fall. Applications must be received no later than July 15<sup>th</sup> for consideration for the fall cohort.

COURSE	TITLE	S.H.
<b>Core Requirements</b>		
FOUN 6904	Introduction to Educational Research	3
SPED 6900	Issues, Trends & Foundations in Special Education	3
SPED 6906	Characteristics and Behaviors of Learners with Mild/Moderate and Moderate/Intensive Exceptional Le	3
SPED 6929	Assessment of Gifted and Exceptional Learners	3
SPED 6914	Behavior Management for Educators	3
<b>Autism and Related Disabilities Option</b>		
SPED 5810	Introduction to Sign Language	3
SPED 6928	Transition and Life Skill Supports for Learners with Moderate/Intensive Exceptional Learning Needs	3
SPED 6993	Health and Related Issues in Early Childhood Special Education	2
SPED 6996	Teaching Strategies/Autism	4
SPED 6998	AAC Strategies	3

## Learning Outcomes

1. Candidates will analyze learners to determine unique needs using the principles and theories of human development.
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3. Candidates will individualize instruction to meet the unique learning, communication, social and behavior needs of students with exceptional learning needs.
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5. Candidates will demonstrate reinforcement-based classroom management interventions with students with exceptional learning needs.
6. Candidates will evaluate the progress of students with exceptional learning needs on their IEP goals to inform the adjustment of learning and behavior plans

## Admission Requirements

In addition to the minimum College of Graduate Studies admission requirements, all master's in special education applicants must have the following:

- 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.);
- Three Letters of Reference or Reference forms, at least two of which should be prepared by current or former faculty;
- Official transcripts of all undergraduate or graduate work completed;
- Letter of intent – Candidates must provide a one page response to each of the following:
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  - What is the purpose of obtaining this degree?
- Special Education interview
- Application Deadline: July 15<sup>th</sup>. Students admitted once per year for fall semester.

To take classes as a non-degree candidate, the approval of the department chair must be obtained. Non-degree candidates choosing to earn a degree must make formal application for admission to the degree program. A GPA of 3.0 must be maintained in order to convert from non-degree to regular status.

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Individuals without a teaching certificate will also need to complete the Ohio Reading Requirement (TERG 3701, TERG 3702, TERG 3703, TERG 3701), OAE APK exam (Special Education content) and Foundations of Reading tests, PSYC 3709 or PSYC 6903 or equivalent, 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. Marcia Matanin, Department Chairperson and Graduate Program Coordinator  
2405 Beeghly College of Education  
(330) 941-3251  
mjmatanin@ysu.edu

## Introduction

The master's degree teacher education programs provide advanced professional preparation for teachers. The Department of Teacher Education provides master's degrees in three specialty areas for post baccalaureate study toward the M.S. in Education: Content Area Concentration, Curriculum and Instruction, and Literacy. The Teacher Education Master's programs focus 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, management, communication, and interpersonal relations. Professional practitioners are committed to the belief that all children can learn.

For more information about the Department of Teacher Education, please contact the Teacher Education Office at (330)-941-3251.

## Mission

The Department of Teacher Education's 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 the Department of Teacher Education are accredited by the National Council for Accreditation of Teacher Education (NCATE). <http://www.ncate.org/>.

## Graduate Faculty

**M. Kathleen L. Cripe**, Ph.D., Associate Professor  
STEM education; co-teaching

**Lauren Cummins**, Ed.D., Professor  
Literacy development; mentorship; developmentally appropriate practice; learning communities; professional dispositions; digital storytelling; distance education

**Mary Lou DiPillo**, Ph.D., Associate Professor  
Content area literacy

**Mary E. LaVine**, Ph.D., Associate Professor  
Teacher mentoring; school/university partnerships

**Megan List**, Ph.D., Assistant Professor  
Technology in social studies; school/university partnerships; LGBTQ issues

**Marcia Matanin**, Ph.D., Professor, Chair  
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

**Gail Saunders-Smith**, Ph.D., Associate Professor  
Development of emergent writing; role of text structures on comprehension; impact of teacher-student discourse on student learning

## Graduate Courses

**ECE 6910 Curriculum, Theories, and Methods in Early Childhood Education, Pre-K-Grade 3 3 s.h.**

Investigation of curriculum, theories, and assessment and how they relate to children's learning. Attention given to the role of parents as teachers.

**ECE 6911 Early Childhood Pedagogy in Math and Science 4 s.h.**

By exploring math and science teaching practice for grades K-3, the candidates will review teaching methods of math and science, find and design math and science programs and lessons, incorporate national and state standards in teaching math and science, and strengthen the assessment methods for classroom instruction. This course is linked to ECE 6921 in terms of an action research to solve real problems in teaching math and science for the participating teachers.

**ECE 6920 Current Social Issues in Early Childhood Education 3 s.h.**

Analysis of contemporary issues, trends, and current educational policies that impact classroom practices. Includes service-learning component.

**Prereq.:** ECE 6910 or ECE 6911.

**ECE 6921 Action Research in Early Childhood Education, Pre-K-Grade 3 3 s.h.**

Designed as a culminating experience. Direct participation is required for the successful completion of a field study, onsite project, or other classroom-based experience deemed suitable by the student's major faculty advisor.

**Prereq.:** ECE 6911 and FOUN 6904.

**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.

**EMCE 5816 Diagnosis and Remediation of Elementary School Mathematics 2 s.h.**

In-depth study of diagnosis and remediation as they affect the elementary school mathematics program. Includes discussions, field trips, demonstrations and laboratory work.

**Prereq.:** Admission to COE upper-division status.

**EMCE 5900 Early/Middle Childhood Education Workshop 1-4 s.h.**

Intensive study of selected topics, issues, or problems of current interest in early and/or middle childhood education. Grading is S/U. May be repeated.

**EMCE 5901 Early/Middle Childhood Education Workshop 1-4 s.h.**

Intensive study of selected topics, issues, or problems of current interest in early and/or middle childhood education. Grading is S/U. May be repeated.

**EMCE 5902 Early/Middle Childhood Education Workshop 1-4 s.h.**

Intensive study of selected topics, issues, or problems of current interest in early and/or middle childhood education. Grading is S/U. May be repeated.

**EMCE 5903 Early/Middle Childhood Education Workshop 1-4 s.h.**

Intensive study of selected topics, issues, or problems of current interest in early and/or middle childhood education. Grading is S/U. May be repeated.

**EMCE 6918 Elementary School Mathematics Programs 3 s.h.**

An analysis of past and present programs of elementary school mathematics; evaluation of programs, including a consideration of adequacy of content, recognition of mathematics as a system, and provision of number experiences for the learner.

**EMCE 6919 Social Studies Programs in the Elementary School 3 s.h.**

Objectives of elementary school social studies programs in terms of current needs; adaptation of materials of instruction in terms of the social science skills; evaluation of student progress; critical analysis of methods of improving instruction in social studies.

**EMCE 6920 Elementary School Science Programs 3 s.h.**

Focus on the objectives for science education in the elementary school; the elementary school science curriculum; process and inquiry in the elementary school science curriculum; process and inquiry in the elementary school science program; teacher education; educational media; and the evaluation of science teaching.

**EMCE 6921 Issues, Problems, Developments, and Curriculum in Elementary Education 3 s.h.**

A study of recent trends in elementary school organization and instruction (non-graded units, team teaching, middle schools, etc.) Developing an understanding of the meaning of curriculum at the elementary level, evidence of need for curricular changes, influences of society on curriculums, exploration of current status and trends; and the role of teacher and administrator in curriculum appraisal and development.

**EMCE 6990 Independent Study 1-4 s.h.****EMCE 7042 Professional Development for Classroom Teacher Educators 2 s.h.**

A restricted professional development course for classroom teacher educators invited to supervise the instructional program of student teachers and field experience students. The course concentrates on developing analytical observation, conferencing, evaluation, and supervision skills based on scientific knowledge and theoretical constructs.

**Prereq.:** Invitation from YSU and endorsement from home school district to serve as a classroom teacher educator.

**Cross-listed:** SPED 7042 and SED 7042.

**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 5888J Topical Seminar Introduction to African American Education 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 5888R Topical Seminar OAE Reading Review 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 5888S Topical Seminar Study Abroad Czech Republic 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 5888T Topical Seminar Test Review 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 5992 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 5993 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 6901 National Board for Professional Teaching Standards (NBPTS) Assessment Center 3 s.h.**

The participants of this course will practice for the National Board for Professional Teaching Standards Assessment Center entries, which emphasize content knowledge. Participants will learn how to assess their own content knowledge. They will continue to write their NBPTS portfolio entries with direction from the professor, an NBCT mentor, and feedback from peers. Helpful aids, techniques, technology, and resources will be accessed.

**Prereq.:** Baccalaureate degree, three years of teaching, currently teaching, NBPTS candidate.

**TCED 6902 National Board for Professional Teaching Standards (NBPTS) Portfolio Development 4 s.h.**

The participants of this course will write their National Board for Professional Teaching Standards portfolio with direction from the professor, an NBCT mentor, and feedback from peers. Helpful aids, techniques, and resources will be accessed. Participants will learn how to assess their own teaching and how to best represent themselves through writing, evidence, artifacts, and videotapes.

**Prereq.:** Baccalaureate degree, three years of teaching, currently teaching, NBPTS candidate.

**TCED 6903 National Board for Professional Teaching Standards (NBPTS) Advanced Candidacy 1 s.h.**

The participants of this course need an additional year in obtaining National Board for Professional Teaching Standards certification and want to take advantage of guidance in demonstrating they are accomplished teachers. This course allows candidates to choose either a portfolio or an assessment center entry to intensely address, as it helps candidates analyze the development needed to clearly, consistently, and convincingly address the NBPTS entry in writing.

**Prereq.:** Baccalaureate degree, three years of teaching, currently teaching, NBPTS advanced candidate.

**TCED 6904 Teacher Leadership Internship 1-3 s.h.**

A practicum with emphasis on teacher supervision, coaching, mentoring, teacher leadership, and planned professional development. May be repeated. 1-3 s.h.

**Prereq.:** baccalaureate degree, three years of teaching.

**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 6909 Orientation to On-Line Learning 1 s.h.**

This course provides an introduction and orientation to on-line learning, while acquainting students with the platform of BB9, distance education technologies, YSU and BCOE. (The ECE program highly recommends this course before taking any of the distance learning courses in the program). Grading is S/U.

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

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.

**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 6934 Assessment and Accountability 3 s.h.**

In-depth study of mandates, policies, procedures, metrics, and consequences of pupil, teacher, and institutional assessment/evaluation models including formative and summative aspects.

**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 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.

**TCED 6951 Interpersonal Communications for Educators 3 s.h.**

Techniques of communicating effectively with teachers, administrators, nonteaching personnel, pupils, and parents. Organizing the overall communications programs within the school. Related problems.

**Prereq.:** Admission to the School of Graduate Studies and Research.

**TCED 6959 Law and Ethics for the Classroom Teacher 3 s.h.**

Examination of the legal, ethical, and civic dimensions and interrelations in teaching and schooling from the standpoint of the roles of the teacher and student.

**Prereq.:** Admission to the School of Graduate Studies and Research.

**TCED 6999 Proactive Grantseeking 3 s.h.**

Study of recent trends in grantseeking (values-based grantseeking, proactive grants systems, looping, etc.); developing an understanding of the grants marketplace; developing and refining grant-winning ideas; examining the role of teacher, administrator, and community members in grantseeking; using advisory committees/advocacy groups; writing grant proposals; government and private funding sources; choosing the correct marketplace; and follow-up procedures.

**TCED 7032 Advanced Supervision and Leadership 3 s.h.**

Practitioner-based supervision in education, from research and theory in education, business, and the applied behavioral sciences with emphasis on supervision, coaching, mentoring, teacher leadership, and planning professional development.

**TCED 8101 Adult Learning: Theories and Techniques for College Teaching 3 s.h.**

This course focuses on theory and practice related to working with adult learners in higher education and in professional development contexts. Issues related to the design, development, evaluation, and assessment of college instruction, student affairs, services, and professional development programs will be the primary content of the course.

**TEMC 6938 Early Adolescent Characteristics and Educational Program Needs 3 s.h.**

Application of research and theories about the physical, cognitive, emotional, moral, and social development of ten- to 15-year-olds to middle grade instructional decisions. Students will reflect upon and analyze policy and program implications based on developmental principles and investigate effective collaboration with family and others involved with the age group. Includes field inquiry.

**TEMC 6939 Organizational Components of Middle Level Schools 3 s.h.**

Reflection on theory and research information concerning the historic, philosophical, and organizational components of middle-level schools, including program assessment and evaluation of learning environments for appropriateness to early adolescent learners.

**Prereq.:** TEMC 6938.

**TEMC 6940 Inquiry into Current Issues in Middle-Level Education 1-3 s.h.**

Application of previously acquired knowledge, critical thinking, inquiry techniques, including Internet searches, and collaborative synthesis strategies to significant middle-level education problems. Cohort inquiry team participants will present a multimedia reform proposal. May be repeated.

**Prereq.:** TEMC 6938 and TEMC 6939.

**TEMC 6941 Pedagogy Appropriate for Early Adolescent Learners 3 s.h.**

A course linking the learning needs of early adolescents with a variety of curricular and instructional approaches and assessments. Students will reflect on pedagogical theories and research on ways to integrate middle-level curriculum and promote learning construction by students, participate in professional collaboration, investigate alternative assessment techniques, and design an action research project to apply their understanding.

**Prereq.:** TEMC 6940.

**TEMC 6942 Action Research: Pedagogy Appropriate for Early Adolescent Learners 3 s.h.**

A culminating middle-grade-level classroom teacher research project implementing the design of the study organized in TEMC 6941. Students will review authentic assessment literature, collect and analyze evaluation data collaboratively with students, interpret results, and propose improvements.

**Prereq.:** TEMC 6941.

**TEMC 6943 Field Experience: Service Learning and School-Community Collaboration 3 s.h.**

Field experience study of middle-grade-level school-community collaboration and opportunities for service learning to promote healthy development of early adolescents. Participants design, administer, and analyze an interview survey and propose a collaborative model for interaction.

**TEMC 6950 Pedagogical Content Knowledge in Mathematics for Middle School Teachers 1 3 s.h.**

Integrates mathematics content, mathematics pedagogy, and results from mathematics education research through direct instruction and inquiry-based experiences with manipulative materials and technology. Develops conceptual foundations through topics of number, number sense, and measurement; operations, functions, patterns, and algebra; and mathematical processes. Field experience in a middle grades learning environment is required.

**Prereq.:** Middle Childhood Licensure in area(s) other than mathematics.

**TEMC 6951 Pedagogical Content Knowledge in Mathematics for Middle School Teachers 2 3 s.h.**

Integrates mathematics content, mathematics pedagogy, and results from mathematics education research through direct instruction and inquiry-based experiences with manipulative materials and technology. Develops conceptual foundations through topics of geometry, measurement, and spatial sense; data analysis and probability; and mathematical processes.

**Prereq.:** Middle Childhood Licensure in area(s) other than mathematics, TEMC 6950.

**TEMC 6952 Science for Middle School Teachers 1 3 s.h.**

Using NSES/NSTA/NCATE and Ohio Standards as the framework, candidates engage in a purposefully integrated in-depth exploration of science content and pedagogy appropriate for middle grades teachers. Topics include content, inquiry, general skills of teaching, curriculum, assessment, safety and welfare, and professional growth. Experiences that integrate science content with processes and problem-solving skills for achieving life-long learning and science literacy will be emphasized. Portions of the course may be offered on-site, on-line, or as a combination of both. Field experience in a middle grades learning environment is required.

**Prereq.:** Admission to the School of Graduate Studies and Research and Middle Childhood Licensure area(s) other than science.

**TEMC 6953 Science for Middle School Teachers 2 3 s.h.**

Using NSES/NSTA/NCATE and Ohio Standards as the framework, candidates engage in a purposefully integrated in-depth exploration of science content and pedagogy appropriate for middle grades teachers. Topics include content, nature of science, issues, science in the community, and professional growth. Experiences that integrate science content with processes and problem-solving skills for achieving life-long learning and scientific literacy will be emphasized. Portions of the course may be offered on-site, on-line, or as a combination of both. Field experience in a middle grades learning environment is required.

**Prereq.:** Admission to the School of Graduate Studies and Research and Middle Childhood Licensure in area(s) other than science.

**TEMC 6954 Middle School: Theory, Research, and Practices 3 s.h.**

Major concepts, research, and theories about the physical, cognitive, emotional, moral, and social development of students in grades 4-9. Research historical, philosophical, and organizational components of middle grades schools, including program assessment and evaluation of learning environments. Emphasis will be placed on research and position statements from National Middle School Association. Students will design an action research project to apply their understanding.

**Prereq.:** Admission to School of Graduate Studies and Research.

**TEMC 6955 Field Experience: Middle Years School/Community Collaboration 3 s.h.**

Field experience study of middle grades level school/community collaboration and opportunities for service learning to promote healthy development of early adolescents. Additional research into current issues and challenges facing middle schools today. Participants design, administer, and analyze an interview and survey instrument and propose a collaborative service learning model.

**Prereq.:** Admission to School of Graduate Studies and Research.

**TERG 6917 Literacy, Reading, and Language Arts Programs 3 s.h.**

A critical appraisal of literacy, reading, and language arts programs in schools and an analysis of contemporary methodological issues.

**TERG 6922 Organizing and Managing Diverse Literacy Environments 3 s.h.**

Creating a literate environment that fosters student interest in reading and writing by integrating foundational knowledge, use of research-based instructional practices, curriculum materials, and assessment-based decision making to form instructional groups. Emphasis on student interests, reading abilities, and cultural and linguistic backgrounds as foundations for a reading and writing program that incorporates a large supply of books, technology-based information, and non-print materials.

**TERG 6923 Literacy and Phonics Instruction: Early Years 3 s.h.**

An investigation and research of the philosophy, principles, and practices of reading (including phonemic and phonetic developments) and language arts of the child, birth through age 8. Examination and application of formal and informal assessment procedures in the context of reading and language arts instruction. Language learning needs of diverse populations will be addressed.

**TERG 6924 Content Literacy Young Adolescent to Adult 3 s.h.**

Investigation of research-based philosophies, principles, and best practices for reading to learn and using the language arts in comprehending and meaning-making; using reading and the language arts as tools in learning communication.

**TERG 6926 Reading and Language Arts Assessment 1 3 s.h.**

An examination and application of formal and informal assessment procedures in the context of reading and language arts instruction. Emphasis will be placed on the use of background information and discrete data. Strategies providing for effective appraisal procedures and developmentally appropriate activities will be included.

**Prereq.:** TERG 6917.

**TERG 6927 Practicum: Coaching for Effective Literacy Instruction 3 s.h.**

The role of the literacy coach as an instructional leader in assessment-based decision making, research-based instruction, and delivery of high-quality professional development. Emphasis placed on 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 involves supervised formal and informal assessment of school-age pupils, developing an individualized reading plan, selecting appropriate strategies and materials for teaching, writing, tutoring log entries, developing a student portfolio, evaluating results of instruction, and writing a case study report.

**Prereq.:** TERG 6926.

**TERG 6929 The Reading and Language Arts Professional 3 s.h.**

Investigation of theories and performance-based procedures for creating, analyzing, guiding, and changing school- and system-wide reading and language arts programs.

**Prereq.:** TERG 6926.

**TERG 6970 Coaching in Diverse Classrooms 2 s.h.**

The focus of this course is on the preparation of literacy specialists to coach teachers in the implementation of culturally responsive instruction for diverse learners. This population includes special needs, culturally and linguistically diverse students. Emphasis will be placed on connections between current theory, research, and instructional practice.



**TERG 6971 Pedagogy of Effective Literacy Instruction 2 s.h.**

Candidates demonstrate knowledge of a wide range of instructional practices, methods, and curriculum materials, including technology, that support effective reading and writing instruction. Candidates integrate their knowledge and dispositions regarding curriculum, instructional practices, curricular materials, assessment, and evaluation to create literate environments that foster both reading and writing in all students.

**Prereq.:** TERG 6970.

**TERG 6972 Coaching for Effective Assessment Practice 2 s.h.**

Designed for reading specialists, this course teaches knowledge, skills, and dispositions in school-based professional development and coaching on K-12 reading assessment concepts and skills.

**Prereq.:** TERG 6971.

**TERG 6973 Professional Development in Literacy 2 s.h.**

An introduction to research and knowledge bases related to teacher professional development from a variety of perspectives. Examines coaching as one venue of supporting teacher professional development.

**Prereq.:** TERG 6972.

**TERG 6974 Advanced Action Research in Literacy 2 s.h.**

Intro to literacy research as an integral part of professional development. Builds candidate understanding of a variety of literacy research paradigms, supports engagement in inquiry to significantly advance candidates' understanding of literacy, and provides opportunities for candidates to collaborate with other literacy professionals to advance understanding of evidence-based practice.

**Prereq.:** TERG 6973.

**TERG 6975 Internship 1 4 s.h.**

Culminating activity supporting and integrating accomplishment of the Literacy Specialist Endorsement Standards I-VII. School-based practicum providing group and individual professional development to colleagues for continuous improvement of literacy curriculum, instruction, and assessment. Diagnostic reading and writing clinical experiences focus on data-based decision making to inform professional development provided in both group and individual settings (coaching).

**Prereq.:** TERG 6971.

**TERG 6976 Internship 2 4 s.h.**

Continuation of the culminating activity supporting and integrating accomplishment of the Literacy Specialist Endorsement Standards I-VII. School-based practicum providing group and individual professional development to colleagues for continuous improvement of literacy curriculum, instruction, and assessment. Diagnostic reading and writing clinical experiences focus on data-based decision making to inform professional development provided in both group and individual settings (coaching).

**Prereq.:** TERG 6975.

## 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. The completion of this master's degree, along with the certificate, enables teachers to teach in the College Credit Plus Program.

COURSE	TITLE	S.H.
<b>Core Requirements</b>		
TCED 6936	Curriculum, Assessment, and Instruction to Improve Learning	3
TCED 6933 or PSYC 6903	Brain Based Teaching and Learning Psychology of Learning and Education	3
TCED 6932 or FOUN 6904	Action Research in Urban and Rural Education Introduction to Educational Research	3
TCED 6922	Principles of Instruction	3

TCED 6905	Introduction to Digital Teaching and Learning	3
Content Area Courses		18
Students choice of 18 semester hours of content area coursework in the respective area of licensure.		
Content Area, Art		
Content Area, Economics		
Content Area, English		
Content Area, Family & Consumer Science		
Content Area, Foreign Language		
Content Area, Health		
Content Area, History		
Content Area, K-12 Reading Endorsement		
Content Area, Mathematics		
Content Area, Music		
Content Area, Physical Education		
Content Area, Science		
Content Area, Teaching English to Speakers of Other Languages		
Or:		
Students choose content coursework from one of the following approved CCP certificate programs:		
Biological Sciences		
Economics		
English		
Environmental Sciences		
History		
Mathematics		
Total Semester Hours		33

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

Content Area majors are to consult with assigned graduate faculty advisors regarding the choice of content coursework. For students choosing the CCP certificate programs, they are required to consult with the individual departmental graduate faculty or director for acceptance and advisement. Please contact the Department of Teacher Education for CCP program director contact information.

All candidates must take and successfully pass the Comprehensive Examination which covers the Core Requirements (TCED 6936, TCED 6933, TCED 6932, TCED 6922, and TCED 6905) in order to apply for graduation. Please see the Department of Teacher Education for applications, times, and dates for the examination. Effective Summer 2017, all candidates will be completing a comprehensive eportfolio instead of the Comprehensive Examination.

## Content Area Concentration

Dr. Marcia Matanin, Department Chairperson and Graduate Program Coordinator  
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### Introduction

The master's degree teacher education programs provide advanced professional preparation for teachers. The Department of Teacher Education provides master's degrees in three specialty areas for post baccalaureate study toward the M.S. in Education: Content Area Concentration, Curriculum and Instruction, and Literacy. The Teacher Education Master's programs focus 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, management, communication, and interpersonal relations. Professional practitioners are committed to the belief that all children can learn.

For more information about the Department of Teacher Education, please contact the Teacher Education Office at (330)-941-3251.

## Mission

The Department of Teacher Education's 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 the Department of Teacher Education are accredited by the National Council for Accreditation of Teacher Education (NCATE). <http://www.ncate.org/>.

## 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. The completion of this master's degree, along with the certificate, enables teachers to teach in the College Credit Plus Program.

COURSE	TITLE	S.H.
<b>Core Requirements</b>		
TCED 6936	Curriculum, Assessment, and Instruction to Improve Learning	3
TCED 6933	Brain Based Teaching and Learning	3
or PSYC 6903	Psychology of Learning and Education	
TCED 6932	Action Research in Urban and Rural Education	3
or FOUN 6904	Introduction to Educational Research	
TCED 6922	Principles of Instruction	3
TCED 6905	Introduction to Digital Teaching and Learning	3
Content Area Courses		18
Students choice of 18 semester hours of content area coursework in the respective area of licensure.		
Content Area, Art		
Content Area, Economics		
Content Area, English		
Content Area, Family & Consumer Science		
Content Area, Foreign Language		
Content Area, Health		
Content Area, History		
Content Area, K-12 Reading Endorsement		
Content Area, Mathematics		
Content Area, Music		
Content Area, Physical Education		
Content Area, Science		
Content Area, Teaching English to Speakers of Other Languages		

Or:	
Students choose content coursework from one of the following approved CCP certificate programs:	
Biological Sciences	
Economics	
English	
Environmental Sciences	
History	
Mathematics	
Total Semester Hours	33

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

Content Area majors are to consult with assigned graduate faculty advisors regarding the choice of content coursework. For students choosing the CCP certificate programs, they are required to consult with the individual departmental graduate faculty or director for acceptance and advisement. Please contact the Department of Teacher Education for CCP program director contact information.

All candidates must take and successfully pass the Comprehensive Examination which covers the Core Requirements (TCED 6936, TCED 6933, TCED 6932, TCED 6922, and TCED 6905) in order to apply for graduation. Please see the Department of Teacher Education for applications, times, and dates for the examination. Effective Summer 2017, all candidates will be completing a comprehensive eportfolio instead of the Comprehensive Examination.

## 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 standards.
- 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:
  - Applications of data literacy;
  - Use of research and understanding of qualitative, quantitative and/or mixed methods research methodologies;
  - Employment of data analysis and evidence to develop supportive school environments;
  - Leading 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;
  - Application of 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 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:

- 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.);

- Three Letters of Reference or Reference forms, at least two of which should be prepared by current or former faculty;
- Official transcripts of all undergraduate or graduate work completed;
- Letter of intent – Candidates must provide a one page response to each of the following:
  - What are the personal attributes that have prepared you for this profession?
  - What is the purpose of obtaining this degree?
- Special Education interview
- Application Deadline: July 15th. Students admitted once per year for fall semester.

To take classes as a non-degree candidate, the approval of the department chair must be obtained. Non-degree candidates choosing to earn a degree must make formal application for admission to the degree program. A GPA of 3.0 must be maintained in order to convert from non-degree to regular status.

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 3701), and passage of the appropriate PRAXIS exam is 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 3701), OAE APK exam (Special Education content) and Foundations of Reading tests, PSYC 3709 or PSYC 6903 or equivalent, SPED 4849 Supervised Student Teaching, and SPED 4869 Student Teaching Seminar, and passage of the appropriate licensure exam as required by ODE.

## Curriculum and Instruction

Dr. Marcia Matanin, Department Chairperson and Graduate Program Coordinator  
 2405 Beeghly College of Education  
 (330) 941-3251  
 mjmatanin@ysu.edu

### Introduction

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### Mission

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interpersonal relations. The Department also offers a variety of professional development courses and workshops.

#### Accreditation

The master’s programs in the Department of 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.
Core Requirements		9
TCED 6936	Curriculum, Assessment, and Instruction to Improve Learning	
PSYC 6903	Psychology of Learning and Education	
FOUN 6904	Introduction to Educational Research	
Core Options		6
Choose one:		
FOUN 6901	Philosophical Analysis of Education	
FOUN 6902	Sociological Bases of Education	
Choose one:		
EDTC 6905	Technology in Instructional Settings	
TCED 6951	Interpersonal Communications for Educators	
TCED 6959	Law and Ethics for the Classroom Teacher	
TCED 6999	Proactive Grantseeking	
Speciality Program Area		18
TCED 6922	Principles of Instruction	
Select five courses (15 s.h.) from the College of Education approved by the student’s advisor. Generally it is advised that one course in each of the foundations, counseling and special education is taken as well as three courses from the Department of Teacher Education.		
Total Semester Hours		33

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).

Curriculum and Instruction majors are to consult with assigned graduate faculty advisors regarding the choice of elective coursework.

All candidates must take and successfully pass the Comprehensive Examination which covers the following coursework (TCED 6936, FOUN 6904, FOUN 6901 or FOUN 6902, and TCED 6922) in order to apply for graduation. Please see the Department of Teacher Education for applications, times, and dates for the examination. Effective Summer 2017, all candidates will be completing a comprehensive eportfolio instead of the Comprehensive Examination.

## 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 standards.
- 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:

- Applications of data literacy;
  - Use of research and understanding of qualitative, quantitative and/or mixed methods research methodologies;
  - Employment of data analysis and evidence to develop supportive school environments;
  - Leading 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;
  - Application of 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 discipline-specific standards.

## Admission Requirements

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## Literacy

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### Accreditation

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## Literacy Program

The Literacy Master and/or Reading (Pre K-12) Endorsement program specialty area prepares candidates to develop advanced cognitive and leadership skills appropriate for lead teacher, curriculum coordinator, and mentor in literacy. Literacy professionals with an endorsement and/or master's degree in literacy are responsible for meeting literacy needs of all students. The standards and criteria for judging candidates are established by the International Literacy Association (ILA) and mandated by the Ohio Department of Education.

COURSE	TITLE	S.H.
Core Requirements		9
TCED 6936	Curriculum, Assessment, and Instruction to Improve Learning	
TCED 6933	Brain Based Teaching and Learning or PSYC 6903 Psychology of Learning and Education	
TCED 6932	Action Research in Urban and Rural Education or FOUN 6904 Introduction to Educational Research	
Specialty Area Courses		24
The following courses should be taken in sequence. Please see advisor for more information.		
TERG 6917	Literacy, Reading, and Language Arts Programs	
TERG 6922	Organizing and Managing Diverse Literacy Environments	
TERG 6923	Literacy and Phonics Instruction: Early Years	
TERG 6924	Content Literacy Young Adolescent to Adult	
TERG 6926	Reading and Language Arts Assessment 1	
TERG 6927	Practicum: Coaching for Effective Literacy Instruction	
TERG 6928	Practicum: Case Study in Reading and Language Arts	



## TERG 6929 The Reading and Language Arts Professional

Total Semester Hours

33

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 literacy candidates must pass a comprehensive examination covering all of the Specialty Area Courses. Please see the Department of Teacher Education for applications, times, and dates. Effective Summer 2017, all candidates will be completing a comprehensive eportfolio instead of the Comprehensive Examination.

"An endorsement of a teacher license, valid for teaching the subject or learners named, shall be issued to an individual who holds a baccalaureate degree; who is deemed to be of good moral character; who has successfully completed an approved program of preparation; who has successfully completed an examination prescribed by the State Board of Education; and who has been recommended by the dean or head of teacher education at an approved institution. The endorsement may be added to any standard teaching certificate, or provisional or professional teaching license." (From ODE, 2004, Teacher Education Licensure Standards) The courses required for the Endorsement are TERG 6923, TERG 6924, TERG 6926, TERG 6927, and TERG 6928.

Passage of the Ohio Assessments for Educators (OAE) is required by the Ohio Department of Education for the endorsement. There are two parts to this examination: OAE Reading-Subtest I (038) passing score of 220 or higher; and the OAE Reading-Subtest II (039) passing score of 220 or higher. To register for the exams go to <http://www.oh.nesinc.com>.

## 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 standards.
- 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:
  - Applications of data literacy;
  - Use of research and understanding of qualitative, quantitative and/or mixed methods research methodologies;
  - Employment of data analysis and evidence to develop supportive school environments;
  - Leading 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;
  - Application of 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 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:

- 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.);

- Three Letters of Reference or Reference forms, at least two of which should be prepared by current or former faculty;
- Official transcripts of all undergraduate or graduate work completed;
- Letter of intent – Candidates must provide a one page response to each of the following:
  - What are the personal attributes that have prepared you for this profession?
  - What is the purpose of obtaining this degree?
- Special Education interview
- Application Deadline: July 15th. Students admitted once per year for fall semester.

To take classes as a non-degree candidate, the approval of the department chair must be obtained. Non-degree candidates choosing to earn a degree must make formal application for admission to the degree program. A GPA of 3.0 must be maintained in order to convert from non-degree to regular status.

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 3701), and passage of the appropriate PRAXIS exam is 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 3701), OAE APK exam (Special Education content) and Foundations of Reading tests, PSYC 3709 or PSYC 6903 or equivalent, 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 Engineering

The Rayen School of Engineering and Engineering Technology, 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 grants-in-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 and Engineering Technology 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

**Martin A. Abraham**, Ph.D., Professor  
Green engineering; sustainability

**Pedro Cortes**, Ph.D., Associate Professor  
Structure-property relationships of polymers; composites and hybrid materials; smart materials and structures; development of chem-bio sensing platforms based on carbon nanotubes

**Jeanette M. Garr**, Ph.D., Professor

## Civil and Environmental Engineering

**Shakir Husain**, Ph.D., Professor  
Pavement materials; design; construction

**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., Assistant 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

**Anthony S. Vercellino**, Ph.D., Assistant Professor  
Water/wastewater treatment; water reuse applications; membrane filtration processes; anti-microbial compounds

## Electrical and Computer Engineering

**Jalal Jalali**, Ph.D., Professor, Chair  
Electromagnetic; power systems; power electronics; FR engineering; energy efficiency

**Frank Xiyang Li**, Ph.D., Professor  
Electron spin resonance imaging; EMC, RF, and software engineering; networks; applied magnetic fields

**Faramarz Doc Mossayebi**, Ph.D., Associate Professor  
Control systems; nonlinear dynamic systems; chaos theory; digital signal processing

**Lin Sun**, Ph.D., Assistant Professor  
Electromagnetics and numerical methods; wave scattering and propagation in complex media; inversion and imaging of subsurface structures; signal integrity analysis in IC design

## Industrial and Systems Engineering

**Martin Cala**, Ph.D., Professor  
Human factors; quality and productivity

**Brett P. Conner**, Ph.D., Associate Professor  
Materials and process development for additive manufacturing (also known as 3D printing); functionally graded materials (FGMs); high-strain rate behavior of AM materials; 3D printing of metal casting tooling; business models for additive manufacturing

**Kevin Disotell**, Ph.D., Assistant Professor  
Turbulent shear flows; aerodynamics; optical flow measurement techniques

**Jason Walker**, Ph.D., Assistant Professor  
Additive Manufacturing; metal casting; aerospace and biomedical systems

## Mechanical Engineering

**Kyosung Choo**, Ph.D., Assistant Professor  
Jet impingement; two-phase flow; electronics cooling; energy audit of building and data center; microchannel heat exchanger; thermal management of energy systems

**Kevin Disotell**, Ph.D., Assistant Professor  
Turbulent shear flows; aerodynamics; optical flow measurement techniques

**Hazel Marie**, Ph.D., Professor, Chair  
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., Assistant Professor  
Mechanical contact, fatigue, fracture, wear and environmental corrosion on structured surfaces under applied forces; fundamental investigation of tribo-corrosion of metallic joint replacements in physiological environment

**Elvin B. Shields**, Ph.D., Professor

Mechanical vibrations; fracture mechanics; kinematics; the scholarship of teaching and learning

**Virgil C. Solomon**, Ph.D., Associate 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

**Jason Walker**, Ph.D., Assistant Professor

Additive Manufacturing; metal casting; aerospace and biomedical systems

## Chemical Engineering

### Option Coordinator

Douglas M. Price  
2068 Moser Hall  
(330) 941-3019  
dmprice@ysu.edu (scmartin@ysu.edu)

### 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 program includes thesis, non-thesis, and engineering management 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.

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,
- 33 semester hours for the nonthesis plan, or
- 36 semester hours for the management plan.

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 PhD 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. This generally consists of:

- six to nine semester hours of core courses,
- 15-18 semester hours of technical concentration courses, and
- six 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 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 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 doctorate 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 36 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.

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.

## Chemical Engineering Requirements

At the time of initial enrollment, the student will select a program plan (thesis, non-thesis, or management) and technical area of interest (e.g. chemical processes, biochemical, environmental, materials). The degree requirements for each program plan are listed in the general description of the Master of Science in Engineering program. A list of required courses and possible electives for each plan may be obtained from the graduate program's option coordinator.

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.

## 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 5800K Special Topics Measurements and Instrumentation 1-4 s.h.** Special topics and new developments in chemical engineering. Subject matter, credit hours, and special prerequisites to be announced in advance of each offering.

**Prereq.:** Consent of instructor.

**CHEN 5805 Principles of Biomedical Engineering 3 s.h.**

Application of engineering principles and methods of analysis to processes in the human body. Rheological, physical and chemical properties of body fluids. Dynamics of the circulatory system. The human thermal system. Transport through cell membranes. Analysis and design of artificial organs.

**Prereq.:** CHEN 2684 or consent of instructor.

**CHEN 5810 The Business of Engineering 3 s.h.**

Industrial processing facilities, and the engineers and business people that run them. Decision-making perspectives and the technical and communication skills of each group are compared. Focus is on quality control, R&D, and efficiency.

**CHEN 5811 Advanced Transport Phenomena 3 s.h.**

Development of basic differential balance equations for mass, momentum and energy. Analytical and approximate solutions to the equation of change with application to the analysis of common engineering problems.

**Prereq.:** CHEN 3786.

**CHEN 5820 Industrial Pollution Control 3 s.h.**

Types, sources and effects of industrial and hazardous waste; principles of industrial and hazardous waste control; discussion and design of biological, physical, and chemical treatment processes.

**Prereq.:** CHEN 2684 or consent of instructor.

**CHEN 5821 Fundamentals of Polymer Science 3 s.h.**

The survey of polymerization mechanisms, polymer structure-property relationships, transport properties, flammability-related plasticizers and solvents as well as design applications.

**Prereq.:** CHEN 2684 or consent of instructor.

**CHEN 5830 Nuclear Reactors 3 s.h.**

Neutron interactions and scattering; moderation ratio, the steady state reactor core and four factor equation, the diffusion equation for various reactor geometries and the reflected reactor core.

**Prereq.:** CHEN 3726 or consent of instructor.

**CHEN 5835 Introduction to Nuclear Fusion 3 s.h.**

Fusion reactors; the kinetics of fusion reactions. Plasma confinement technology.

**Prereq.:** CHEN 3726.

**CHEN 5845 Corrosion Engineering 3 s.h.**

Introduction to causes and forms of corrosion, corrosion rate calculations, electrode potentials, electrochemistry, corrosion testing, and effects of corrosion on mechanical properties. Theory and use of corrosion inhibition methods.

**Prereq.:** CHEN 2684.

**CHEN 5850 Industrial Processes 3 s.h.**

A fundamental approach to the design of industrial chemical processes. Emphasis upon flow-charting, chemical reactions, separations involved, thermodynamics, and economic considerations. Food and pharmaceutical processing is a major focus.

**Prereq.:** CHEN 2684 or consent of instructor.

**CHEN 5854 Corrosion Engineering 3 s.h.**

Introduction to causes and forms of corrosion, corrosion rate calculations, electrode potentials, 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.

**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.

## 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.

## Civil and Environmental Engineering

### Option Coordinator

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

### Program Description

Civil and environmental engineers apply scientific and engineering knowledge to protect and improve the infrastructure, public health and environment. Graduate study in civil and environmental engineering 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 environmental, social, and economic considerations. These objectives are accomplished by flexible plans of study designed to meet the needs of individual 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 program includes thesis, non-thesis, and management plans. The civil and



environmental engineering program offers opportunities for advanced study in two main areas:

- structural/geotechnical engineering and
- environmental/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 SMART Lab, strength of materials lab, hydraulics/fluid mechanics lab, environmental engineering lab, geotechnical engineering lab, and concrete mixtures lab. In addition, the college computer lab provides access to a large number of modern PCs equipped with high-speed internet connections and latest software for modeling in various fields of research.

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,
- 33 semester hours for the nonthesis plan, or
- 36 semester hours for the management plan.

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 PhD 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. This generally consists of:

- six to nine semester hours of core courses,
- 15-18 semester hours of technical concentration courses, and
- six 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 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 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 doctorate 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 36 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.

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.

## Civil and Environmental Engineering Requirements

At the time of initial enrollment, the student will select a program plan (thesis, non-thesis, or management) and technical concentration area (structural/geotechnical or environmental/water resources). The requirements for each program plan are listed in the general description of the Master of Science in Engineering program. Lists of required courses and possible electives for each plan may be obtained from the graduate program coordinator.

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.

Non-thesis students must complete a graduate project under the guidance of a faculty member. Students with management option should consult the graduate program coordinator to develop their coursework plan.

## Learning Outcomes: Civil and Environmental Engineering

- an ability to formulate and solve advanced civil engineering problems; ;
- an ability to apply knowledge in a specialized area of civil and environmental engineering;
- an ability to design and conduct research projects;
- an understanding of business fundamentals, including project planning and management, asset management, leadership, and entrepreneurship;
- an understanding of the role of engineers in society.

### 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 equilibria that occur in aquatic environments, and water/wastewater treatment processes.

**Prereq.:** CEEN 3736.

**CEEN 5837 Environmental Engineering Design 3 s.h.**

Theory and design of unit operations and processes for treatment of drinking water and municipal wastewater.

**Prereq.:** CEEN 3736.

**CEEN 5849 Structural Analysis 2 3 s.h.**

Analysis of statically indeterminate beams, trusses, bents and multistory frames, utilizing concepts of strain energy, virtual work, slope-deflection, and moment distribution. Introduction to matrix methods of analysis using force and displacement methods.

**Prereq.:** CEEN 3749.

**CEEN 5855 Reinforced Concrete Design 3 s.h.**

An introduction to the behavior, analysis, and design of reinforced concrete members. Included are singly and doubly reinforced beams, tee-beams, slabs, short and long columns.

**Prereq.:** CEEN 3749.

**CEEN 5856 Steel Design 3 s.h.**

An introduction to the behavior and design of steel structures. Included is the design of rolled and built-up tension members, beams, columns, beam-columns, welded and bolted connections.

**Prereq.:** CEEN 3749.

**CEEN 5869 Design of Air Pollution Control Systems 3 s.h.**

Engineering analysis, procedures, and techniques for the selection, applications and operation of air pollution control methods in various operational situations.

**Prereq.:** CEEN 3736.

**CEEN 5877 Systems Engineering and Project Management 3 s.h.**

Systems approach to engineering design; non-linear models; linear programming; dynamic programming; network analysis; project management.

**Prereq.:** MATH 3705.

**CEEN 5880 Advanced Hydraulics 3 s.h.**

Application of hydraulic principles for one dimensional river modeling; understanding the fundamental processes of open channel hydraulics; application of HEC-RAS/HEC-GeoRAS models for river system modeling.

**Prereq.:** CEEN 3717 grade of "C" or better.

**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.

**Prereq.:** 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.

## 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.

## Electrical Engineering Electrical Engineering

### Option Coordinator

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### Option Description

The Department of Electrical and Computer Engineering provides opportunities for post-baccalaureate 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, and management options/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,
- 33 semester hours for the nonthesis plan, or
- 36 semester hours for the management plan.

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 PhD 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. This generally consists of:

- six to nine semester hours of core courses,
- 15-18 semester hours of technical concentration courses, and
- six 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 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 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 doctorate 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 36 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.

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.

## Electrical Engineering Requirements

The basic degree requirements for each program plan are described under the general program description for the Master of Science in Engineering. Descriptions of course requirements and available electives for each program plan in the electrical engineering master's program can be obtained from the graduate option coordinator.

Within the first semester of graduate study, every graduate student must complete an option plan form signed by the student, academic advisor, and the department graduate option coordinator. The student may seek another advisor in case of interest changes. Likewise, the student-advisor relationship may be terminated at the advisor's recommendation. The graduate option coordinator is available to discuss these and other issues as appropriate.

Selected electrical engineering (ECEN) graduate courses are offered each semester based on the available teaching resources and student needs. Each graduate candidate is required to receive advising each semester from the department graduate option coordinator before registration. Based on the graduate student's academic background, work experience, and academic goals, the department graduate option coordinator may approve a student's request to substitute a graduate course not listed on the applicable program plan description.

## Learning Outcomes: Electrical Engineering

The Department graduate program offers diverse educational opportunities with its high-standard multidisciplinary curriculum and prepares its students to: Advance their mathematical knowledge and application of electrical 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 electro-chemical, -mechanical, -optical, and -thermal transducers. Signal conditioning and smart sensors.

**Prereq.:** ECEN 3771 or ECEN 3717.

### ECEN 5830 Digital Signal Processing 3 s.h.

Discrete time signals and systems; discrete, fast, and inverse Fourier transforms. Digital filter analysis and design, digital signal processing applications. Two hours lecture, three hours laboratory.

**Prereq.:** ECEN 3710.

### ECEN 5835 Computer Architecture with VHDL 4 s.h.

Use of hardware description languages to design computer components and systems. Arithmetic and logic units, control units, VHDL models for memories and busses, interfacing, transfer design. Survey of modern computer systems.

**Prereq.:** ECEN 3734.

### ECEN 5840 Electric Power Systems 4 s.h.

Modeling of power system components. Power flow, faults, protection systems, and stability problems. Special projects and laboratory experiments including CAD applications for analysis, design, and simulation of power system networks. Three hours lecture, three hours laboratory per week.

**Prereq. or concurrent:** ECEN 4844.

### ECEN 5850 Communications Applications 3 s.h.

Applicable technologies and "real-world" communication components and systems. Design and analysis tools. Emerging technologies, "killer apps", networking, data acquisition, and convergence.

**Prereq.:** ECEN 3710 or ECEN 5808.

### ECEN 5860 Fundamental of Antenna Design and Application 3 s.h.

Examination of dipole, loop aperture, and microstrip antennas; array theory; radiation resistance, directivity, equivalent circuits, input impedance, and basic transceiver architecture. Investigation of practical applications of antennas and arrays in communications systems, radar systems and airborne navigation systems.

**Prereq.:** ECEN 3742 grade of "C" or better and 21 s.h. of ECEN courses.

### ECEN 5879 Computer-Aided Design 3 s.h.

The design, analysis, and modeling of linear and nonlinear networks and systems using a simulation and modeling computer program. Development and use of library models of devices, subcircuits, and subsystems.

**Prereq.:** ECEN 2611 and 21 s.h. of ECEN courses.

### ECEN 5890 Power Electronics 4 s.h.

SCRs, rectifier circuits, commutation techniques, AC controllers, converters, and inverters. Special projects and laboratory experiments including computer applications for analysis, design, and simulation of power electronics network. Three hours lecture, three hours laboratory per week.

**Prereq.:** ECEN 3771 and 21 s.h. of ECEN courses.

### 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 continuous-time 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 quadratic 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.

## Industrial and Systems Engineering

### Option Coordinator

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### Option 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 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,
- 33 semester hours for the nonthesis plan, or
- 36 semester hours for the management plan.

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 PhD 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. This generally consists of:

- six to nine semester hours of core courses,
- 15-18 semester hours of technical concentration courses, and
- six 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 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 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 doctorate 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 36 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.

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.

## Chemical Engineering Requirements

At the time of initial enrollment, the student will select a program plan (thesis, non-thesis, or management) and technical area of interest (e.g. chemical processes, biochemical, environmental, materials). The degree requirements for each program plan are listed in the general description of the Master of Science in Engineering program. A list of required courses and possible electives for each plan may be obtained from the graduate program's option coordinator.

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.

## Industrial and Systems Engineering Requirements

At the time of initial enrollment, the student will select a program plan (thesis, non-thesis, or management) and technical concentration area (engineering management, industrial/manufacturing systems engineering, operations research, etc.) The requirements for each option are enumerated in the general description of the Master of Science in Engineering program. 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 concurrent** 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. Net-shape and additive manufacturing.

**Prereq. or concurrent** ISEN 5823.

### ISEN 5820 Advanced Quality for Engineers 3 s.h.

Applications and practices of quality control in industry. Engineering and administrative aspects of quality control programs, process control, and acceptance sampling. Application of quantitative methods to the design and evaluation of engineered products, processes, and systems.

**Prereq.:** ISEN 3720.

### ISEN 5823 Automation 3 s.h.

Principles and applications of sensing, actuation and control. Emphasis on hydraulic and pneumatic systems. Industrial process controllers, sensors and machine vision. Design and cost considerations for industrial automation applications.

**Prereq.:** MECH 2641, ECEN 2614 or consent of instructor.

### ISEN 5825 Advanced Engineering Economy 3 s.h.

An extension of the topics in engineering economy. Analysis of rationale and norm of decision making, risk and uncertainty models, utility theory, measurement of productivity, and advanced project comparison methods.

**Prereq.:** ISEN 3724.

### ISEN 5830 Human Factors Engineering 3 s.h.

Various aspects of human factors in the design of human-machine systems and environments. Study of human sensory, perceptual, mental, psychomotor, and other characteristics; techniques of measuring human capabilities, limitations, safety, comfort, and productivity.

**Prereq.:** MATH 2673.

### ISEN 5850 Operations Research 2 3 s.h.

Formulation and solution of industrial engineering problems using operational research models. Topics include queuing models and the specialization of linear models to equipment replacement, project planning, assignment, and transshipment problems.

**Prereq.:** ISEN 5801.

### ISEN 5880 Management of Technology 3 s.h.

The course discusses major topics in management of technology and innovations. Dynamics of technology innovation, sources of technology innovations, corporate technology strategy, collaboration and intellectual property, structures and process for innovations, idea generation, commercialization of technology and innovations, and market entry.

**Prereq.:** Senior standing or consent of instructor.

### ISEN 5881 Competitive Manufacturing Management 3 s.h.

Basic principles of manufacturing competitiveness. The role of engineers in promoting competitiveness. Discussion of new technologies used in modern manufacturing management including, continuous improvement, waste elimination, JIT, lean production systems, setup time reduction, equipment maintenance/improvement, total quality management, and supply chain management.

**Prereq.:** ISEN 3723 or consent of instructor.

**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, queuing 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 quality 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 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 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.

## 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.

## Mechanical Engineering

### Option Coordinator

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vcsolomon@ysu.edu

### Option Description

The program option in mechanical engineering 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 and fluid thermal systems. 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 Department of Mechanical 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, and advanced machine design.

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,
- 33 semester hours for the nonthesis plan, or
- 36 semester hours for the management plan.

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 PhD 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. This generally consists of:

- six to nine semester hours of core courses,
- 15-18 semester hours of technical concentration courses, and
- six 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 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 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 doctorate 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 36 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.

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.

## Mechanical Engineering Requirements

At the time of initial enrollment, the student will select a program plan (thesis, non-thesis, or management) and technical concentration area (mechanical analysis/design of rigid and deformable bodies, analysis/design of thermal-fluid systems, etc.). The requirements for each option are listed in the general description of the Master of Science in Engineering program. Lists of required courses and possible electives for each plan may be obtained from the

graduate program option coordinator. In cooperation with an assigned faculty adviser, each student will establish a set of academic goals and desired outcomes, and a coursework plan to meet those objectives.

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 MECH 6990 Thesis.

### 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 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. Cross-listed as CHEN 6983 and ECEN 6983.

**Prereq.:** Permission of graduate advisor.

**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.**

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**MECH 6991 Thesis 2-6 s.h.**

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**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.

## 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.

## Master of Science in Nursing

### Clinical Options

- Adult-Gerontology Acute Care Nurse Practitioner
- Family Nurse Practitioner (FNP)
- Nurse Anesthetist
- Nurse Education

### Post-master's Certificates

- Adult-Gerontology Acute Care Nurse Practitioner
- Family Nurse Practitioner (FNP)
- Nurse Education

### Post-Baccalaureate School Nurse Licensure

- School Nurse

### MSN Program Director

Dr. Valerie O'Dell  
3132 Cushwa Hall  
(330) 941-2177  
vmodell@ysu.edu

## Program Description

The Master of Science in Nursing program is designed for baccalaureate-prepared nurses who have strong undergraduate foundations in critical thinking, decision-making, and nursing practice. The program consists of four program options, with specialization in Family Nurse Practitioner, Nursing Education, and Nurse Anesthesia and three post-master's certificates in Adult-Gerontology Acute Care Nurse Practitioner, Family Nurse Practitioner and Nurse Education. The department 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 Nurse Anesthetist option focuses on the administration of anesthesia to individuals requiring surgical and non-surgical diagnostic procedures. 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>

The Master of Science in Nursing program is also fully accredited by the Accreditation Commission for Education in Nursing (ACEN). For additional information regarding accreditation, contact ACEN:

### Accreditation Commission for Education in Nursing

3343 Peachtree Road NE  
Suite 850  
Atlanta, GA 30326  
Phone: (404) 975-5000

<http://www.acenursing.org/>

In addition, the nurse anesthetist option is fully accredited by the Council on Accreditation of Nurse Anesthesia Educational Programs (COA). For information regarding accreditation, contact COA:

### Council on Accreditation of Nurse Anesthesia Educational Programs (COA)

222 S. Prospect Avenue

Park Ridge, Ill. 60068-4001

Phone: (847)655-1160

<http://home.coa.us.com/Pages/default.aspx>

The Master of Science in Nursing in nurse anesthesia is a cooperative program between Youngstown State University and St. Elizabeth Health Center School for Nurse Anesthetists, Inc. All courses are taught by YSU graduate faculty. Mercy Health supports the program by providing clinical and other resources at St. Elizabeth Youngstown Hospital, St. Elizabeth Boardman Hospital and St. Joseph Warren Hospital. Pediatric clinical experiences are provided at Akron Children's Hospital. Students gain experience in the use of many anesthetic agents and techniques and are supervised by Certified Registered Nurse Anesthetists (CRNAs) and Staff Anesthesiologists from Bel-Park Anesthesia Associates, Inc. Upon successful completion of the degree

program, graduates are eligible to sit for the National Certification Exam by the Council on Certification of Nurse Anesthetists. Once certified, CRNAs must apply for a Certificate of Authority to practice as an Advanced Practice Nurse in the State of Ohio or abide by the laws of the state in which they intend to practice.

Acceptance into the YSU Master of Science in Nursing program is contingent upon acceptance into the St. Elizabeth Health Center School for Nurse Anesthetists, Inc. For additional admission information specific to the Nurse Anesthetist option please contact Dr. Beverly A. Rodgers:

Dr. Beverly A. Rodgers, DNAP, CRNA  
Program Director  
St. Elizabeth Health Center School for Nurse Anesthetists, Inc.  
(330) 480-3444  
[brodgers@belpark.net](mailto:brodgers@belpark.net)

## Graduate Faculty

### Chair

**Nancy Wagner**, D.N.P., Professor, Chair

### Professor

**Kimberly A. Ballone**, D.N.P., Professor

**Patricia L. Hoyson**, Ph.D., Professor

**Susan A. Lisko**, D.N.P., Associate Professor

**Valerie Marie O'Dell**, D.N.P., Associate Professor

**Pamela A. Schuster**, Ph.D., Professor

**Cynthia M. Shields**, D.N.P., Associate Professor

**Amy Weaver**, Ph.D., Associate Professor

## Graduate Courses

### NURS 6900 Professional Issues in Nursing 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.

### NURS 6901 Nursing Science and Research 1 3 s.h.

Analysis of health-related evidence for practice. Exploration of the significance of theory, research, and research methods and strategies for translating evidence into practice.

**Prereq. or concurrent:** NURS 6906.

### 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 6905 Advanced Health Assessment Practicum 5 s.h.**

Application of advanced nursing knowledge and skills from NURS 6904 focusing on the assessment of adult and geriatric populations. To be taken concurrently with NURS 6904.

**Prereq.:** NURS 6902 and NURS 6998.

**NURS 6906 Advanced Statistics 3 s.h.**

Advanced inferential and multivariate statistical techniques used in nursing and other health professions, with emphasis on PASW computer analysis for interpretation of nursing and health data.

**Prereq.:** An undergraduate statistics course or equivalent.

**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.:** NURS 6901, NURS 6902, and NURS 6903, or enrollment in school nurse licensure program.

**NURS 6908 Health Assessment of School Children Practicum 2 s.h.**

Application of advanced nursing knowledge and skills from NURS 6907, focusing on assessment of children in school settings.

**Concurrent:** NURS 6907.

**NURS 6910 Professional Aspects of Nurse Anesthesia 3 s.h.**

Ethics, legal aspects, and professional issues associated with a career in nurse anesthesia. Includes a history of anesthesia and the role of certified registered nurse anesthetists (CRNA).

**Prereq.:** Acceptance into nurse anesthesia option.

**NURS 6911 Pharmacology 1 for Nurse Anesthetists 3 s.h.**

Basic principles of pharmacology including drug effectiveness, mechanism of action, and drug interactions. Emphasis on pharmacological action of drugs on specific organ systems and use in treatment of disease conditions.

**Prereq.:** Acceptance into nurse anesthesia option.

**NURS 6912 Pharmacology 2 for Nurse Anesthetists 3 s.h.**

Comprehensive study of drugs and adjunctive agents used in anesthesia practice. Includes a review of inhalation and intravenous anesthetics, local anesthetics, neuromuscular blocking agents, and adjunctive drugs.

**Prereq.:** NURS 6911.

**NURS 6913 Medical Chemistry and Physics for Nurse Anesthetists 3 s.h.**

Application of organic chemistry, biochemistry, and medical physics in the practice of anesthesia.

**Prereq.:** Acceptance into nurse anesthesia option.

**NURS 6914 Human Anatomy, Physiology, and Pathophysiology 1 for Nurse Anesthetists 3 s.h.**

Study of the structure and function of the human body.

**Prereq.:** Acceptance into nurse anesthesia option.

**NURS 6916 Anesthesia Principles 1 2 s.h.**

Introduction to anesthesia practice and techniques, including preoperative assessments, anesthesia drugs, care plan development and implementation, and safety issues.

**Prereq.:** Acceptance into nurse anesthesia option.

**NURS 6920 Special Topics 1-4 s.h.**

Topics may vary from semester to semester and will be announced along with prerequisites and hours. May be repeated. S/U grading.

**NURS 6998 Anatomy and Physiology of Aging 3 s.h.**

Using a systems approach, this course will examine the anatomical and physiological changes that occur with aging. It will discuss age-related disorders and evaluate the impact of these changes on activities and daily function. This course will be cross-listed with GERO 6998.

**NURS 7000 Adult and Gerontology Care 3 s.h.**

Advanced nursing management of adult and geriatric health care needs. Taken concurrently with NURS 7001.

**Prereq.:** NURS 6904, NURS 6905, and NURS 6998.

**NURS 7001 Adult-Gerontology Care Practicum 5 s.h.**

Application of knowledge and skills from NURS 7000 focusing on advanced nursing management of adult and geriatric health care needs.

**Prereq.:** NURS 6904, NURS 6905, and NURS 6998.

**Concurrent with:** NURS 7000.

**NURS 7002 Nursing Science and Research 2 2 s.h.**

Continuation of NURS 6901, focusing on design, instrumentation, data collection methods, data analysis and data interpretation.

**Prereq.:** NURS 6901 and NURS 6906.

**NURS 7003 Role Development 3 s.h.**

The examination of concepts, theories, and research related to advanced practice role development, teaching, learning, technology, evaluation strategies, leadership, program development, marketing skills, and health care delivery in community settings.

**Prereq.:** NURS 7000, NURS 7001 and NURS 7002.

**NURS 7004 Role Development Practicum 5 s.h.**

Application of concepts, theories, and research from NURS 7003 in a variety of nursing education, health care, and community settings.

**Prereq.:** NURS 7000, NURS 7001, NURS 7002, NURS 7003, or concurrent with NURS 7003.

**NURS 7005 Capstone Practicum 2 s.h.**

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 coursework and approval of 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 7008 Schools and Health 3 s.h.**

Population focus survey of children's health issues and K-12 schools using CDC Coordinated School Health 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.

**Prereq.:** Enrollment in school nurse licensure program.

**Cross-listed:** MPH 7008.

**NURS 7010 Human Anatomy, Physiology, and Pathophysiology 2 for Nurse Anesthetists 3 s.h.**

NURS 6914 Continuation of Anatomy, Physiology, and Pathophysiology I with further emphasis on cardiovascular, respiratory, renal, hepatic, and endocrine systems.

**Prereq.:** NURS 6914.

**NURS 7011 Anesthesia Principles 2 6 s.h.**

Examines specific anesthetic techniques used in a variety of surgical procedures.

**Prereq.:** NURS 6916.

**NURS 7012 Anesthesia Principles 3 8 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 7015 Health Management in Schools Practicum 2 s.h.**

Application of knowledge and skills from NURS 7014, focusing on advanced nursing management of health care needs of children in schools, pre-K through high school. To be taken concurrently with NURS 7014.

**Prereq.:** NURS 6907.

**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, NURS 7015 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 NURS 7016 in pre-K and K-12 school settings to be taken concurrently with NURS 7016.

**Prereq.:** NURS 7014, NURS 7015 or enrollment in school nurse licensure program.

**NURS 7018 Nursing Curriculum Design 3 s.h.**

Foundations of nursing curriculum with designs, development of frameworks, and identification of learning strategies to achieve nursing education learning competencies and outcomes.

**NURS 7019 Nursing Instructional Methods 3 s.h.**

Theoretical foundations and analysis of teaching strategies in academic and clinical settings promoting critical thinking, assessment techniques, and learning outcomes in a variety of nursing education and healthcare settings.

**Prereq.:** NURS 7018.

**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, legal and ethical guidelines, and measurement tools of scoring and grading.

**Prereq.:** NURS 7018, NURS 7019.

**NURS 7021 Nurse Educator Role 4 s.h.**

Examination of concepts, theories and research related to advanced practice role development, teaching, learning, technology, evaluation strategies, leadership, marketing skills, and nursing education practice in academic and health care delivery settings.

**Prereq.:** NURS 7018, NURS 7019, and NURS 7020.

**NURS 7022 Nurse Educator Role Practicum 3-5 s.h.**

Field experience and application of concepts, theories, research findings, teaching strategies, learning, technology, evaluation strategies, leadership, and marketing skills from NURS 7018, NURS 7019, and NURS 7020 in a variety of nursing education and healthcare settings. This practicum will consist of 150 hours.

**Prereq.:** NURS 7018, NURS 7019, and NURS 7020 or concurrent with NURS 7021.

**NURS 7024 Family and Women's Health 3 s.h.**

Primary health care management of family and women in diverse settings. Emphasizes health promotion, illness prevention, disease detection, and identification and management of health problems and concerns affecting families and women throughout the lifespan. Taken concurrently with NURS 7025.

**Prereq.:** NURS 6903 (or concurrent), NURS 6902, NURS 6904.

**NURS 7025 Family and Women's Health Practicum 4 s.h.**

Application of concepts, theories and research from NURS 7024 in a variety of health care settings. Taken concurrently with NURS 7024.

**Prereq.:** NURS 6903 (or concurrent), NURS 6902, NURS 6904.

**NURS 7026 Infant, Child and Adolescent Health 3 s.h.**

Primary health care management of infants, children and adolescents in diverse settings. Emphasis on health promotion, illness prevention, disease detection, and identification and management of health problems and concerns from infancy through adolescence. Taken concurrently with NURS 7027.

**Prereq.:** NURS 6902, NURS 6903, NURS 6904.

**NURS 7027 Infant, Child and Adolescent Health Practicum 5 s.h.**

Application of concepts, theories and research from NURS 7026 in a variety of health care settings. Taken concurrently with NURS 7026.

**Prereq.:** NURS 6902, NURS 6903, NURS 6904.

**NURS 7028 Adult and Older Adult Health 3 s.h.**

Primary health care management of young adults, adults, and older adults in diverse settings. Emphasizes health promotion, illness prevention, disease detection, and identification and management of health problems and concerns affecting young adults, adults, and older adults. Taken concurrently with NURS 7029.

**Prereq.:** NURS 6902, NURS 6903, and NURS 6904.

**NURS 7029 Adult and Older Adult Health Practicum 5 s.h.**

Application of concepts, theories and research from NURS 7028 in a variety of health care settings. Taken concurrently with NURS 7028.

**Prereq.:** NURS 6902, NURS 6903, NURS 6904.

**NURS 7037 Adult-Gero 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-fail elderly) is emphasized. Clinical manifestations of and patient response to particular patient care problems (e.g. cardiovascular, neurological etc.) with emphasis on physical assessment findings for determining a differential diagnosis and planning of patient care needs, health promotion and health maintenance. Taken concurrently with NURS 7038.

**Prereq.:** NURS 6902, NURS 6903 (or concurrent), NURS 6904.

**NURS 7038 Adult-Gero Acute Care 1 Practicum 4-5 s.h.**

Practicum experience in an acute care facility aligned with and taken concurrently with NURS 7039. Emphasis is placed on the APRN-patient/family relationship collaborating with the health care team and health information technology.

**Prereq.:** NURS 6902, NURS 6903 (or concurrent), NURS 6904.

**NURS 7039 Adult-Gero 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. Taken concurrently with NURS 7040.

**Prereq.:** NURS 6902, NURS 6903, NURS 6904, NURS 7017 and NURS 7040.

**NURS 7040 Adult-Gero Acute Care 2 Practicum 4-6 s.h.**

Practicum in an acute care facility aligned to and taken concurrently with NURS 7040. Emphasis is placed on quality improvement and patient safety initiatives, interdisciplinary professional collaboration and functioning within the health system.

**Prereq.:** NURS 6902, NURS 6903 (or concurrent), NURS 6904.

**NURS 7041 Adult-Gero Acute Care 3 3 s.h.**

Focus on the integration of the role components delivered by the adult-gerontology 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 planning 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. Taken concurrently with NURS 7042.

**Prereq.:** NURS 6902, NURS 6903, NURS 6904, NURS 7017, NURS 7038, NURS 7040.



**NURS 7042 Adult-Gero Acute Care 3 Practicum 4-6 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. Possible clinical areas: acute care facilities, disease management clinics (diabetes, heart failure, pain management, dialysis), outpatient facilities (oncology, cardiac rehabilitation, short term rehabilitation, drug and alcohol centers), parish nursing, hospice and palliative care facilities. Taken concurrently with NURS 7041.

**Prereq.:** NURS 6902, NURS 6903 (or concurrent), NURS 6904.

## Adult-Gerontology Acute Care Nurse Practitioner

The areas of coursework in the M.S.N. program include core courses (16 semester hours), and one of the following options:

- Adult-Gerontology Acute Care Nurse Practitioner (51 semester hours)

The breakdown of these course requirements is as follows:

### Adult-Gerontology Acute Care Nurse Practitioner

COURSE	TITLE	S.H.
NURS 6904	Advanced Health Assessment	3
NURS 6902	Advanced Pathophysiology	3
NURS 6903	Advanced Pharmacology	3
NURS 6906	Advanced Statistics	3
NURS 6901	Nursing Science and Research 1	3
NURS 7002	Nursing Science and Research 2	2
NURS 6900	Professional Issues in Nursing	3
NURS 7003	Role Development	3
NURS 7004	Role Development Practicum	5
NURS 7005	Capstone Practicum	2
Adult Gero Acute Care Option Courses		
NURS 7037	Adult-Gero Acute Care 1	3
NURS 7038	Adult-Gero Acute Care 1 Practicum	4
NURS 7039	Adult-Gero Acute Care 2	3
NURS 7040	Adult-Gero Acute Care 2 Practicum	4
NURS 7041	Adult-Gero Acute Care 3	3
NURS 7042	Adult-Gero Acute Care 3 Practicum	4
Total Semester Hours		51

## 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.

## 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
- 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 Catalog* 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: 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 is February 1. The FNP option is a cohort-based program (beginning each Fall).

## Family Nurse Practitioner

The areas of coursework in the M.S.N. program include core courses (16 semester hours), and one of the following options:

- Family Nurse Practitioner option (37 semester hours)

The breakdown of these course requirements is as follows:

COURSE	TITLE	S.H.
NURS 6900	Professional Issues in Nursing	3
NURS 6901	Nursing Science and Research 1	3
NURS 6902	Advanced Pathophysiology	3
NURS 6906	Advanced Statistics	3
NURS 7002	Nursing Science and Research 2	2
NURS 7005	Capstone Practicum	2
Family Nurse Practitioner (FNP) Option Courses		
NURS 6903	Advanced Pharmacology	3
NURS 6904	Advanced Health Assessment	3
NURS 7003	Role Development	3
NURS 7004	Role Development Practicum	5
NURS 7024	Family and Women's Health	3
NURS 7025	Family and Women's Health Practicum	4

NURS 7026	Infant, Child and Adolescent Health	3
NURS 7027	Infant, Child and Adolescent Health Practicum	5
NURS 7028	Adult and Older Adult Health	3
NURS 7029	Adult and Older Adult Health Practicum	5
Total Semester Hours		53

- 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 is February 1. The FNP option is a cohort-based program (beginning each Fall).

## 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

## 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
- 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 Catalog* 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: one each from a faculty member, an employer, and a colleague

## Nurse Anesthetist

The areas of coursework in the M.S.N. program include core courses (16 semester hours), and one of the following options:

- Nurse Anesthetist option (34 semester hours)

The breakdown of these course requirements is as follows:

The total semester hours required for the nurse anesthetist option are greater than the usual hour requirements for other master's programs at YSU. The increased number of hours is necessary in order to meet the COA requirements for a nurse anesthesia program.

COURSE	TITLE	S.H.
NURS 6900	Professional Issues in Nursing	3
NURS 6901	Nursing Science and Research 1	3
NURS 6902	Advanced Pathophysiology	3
NURS 6906	Advanced Statistics	3
NURS 7002	Nursing Science and Research 2	2
NURS 7005	Capstone Practicum	2
Nurse Anesthetist Option Courses		
NURS 6910	Professional Aspects of Nurse Anesthesia	3
NURS 6911	Pharmacology 1 for Nurse Anesthetists	3
NURS 6912	Pharmacology 2 for Nurse Anesthetists	3
NURS 6913	Medical Chemistry and Physics for Nurse Anesthetists	3
NURS 6914	Human Anatomy, Physiology, and Pathophysiology 1 for Nurse Anesthetists	3
NURS 6916	Anesthesia Principles 1	2
NURS 7010	Human Anatomy, Physiology, and Pathophysiology 2 for Nurse Anesthetists	3
NURS 7011	Anesthesia Principles 2	6
NURS 7012	Anesthesia Principles 3	8
Total Semester Hours		50

## 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 Anesthetist option are prepared to:

- administer anesthesia in a variety of practice settings to patients needing anesthesia care.
- utilize advanced practice nursing roles within the Health Care Delivery System.

## 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
- 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 Catalog* 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: 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 is February 1. The FNP option is a cohort-based program (beginning each Fall).

## Nurse Education

The areas of coursework in the M.S.N. program include core courses (16 semester hours), and one of the following options:

- Nurse Education option (27 semester hours)

The breakdown of these course requirements is as follows:

COURSE	TITLE	S.H.
NURS 6900	Professional Issues in Nursing	3
NURS 6901	Nursing Science and Research 1	3
NURS 6902	Advanced Pathophysiology	3
NURS 6906	Advanced Statistics	3
NURS 7002	Nursing Science and Research 2	2
NURS 7005	Capstone Practicum	2
Nurse Education Opton Courses		
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	4
NURS 7022	Nurse Educator Role Practicum	5
Cognates: Educational Technology		
Choose one 3 s.h.		3
TCED 6905	Introduction to Digital Teaching and Learning	
TCED 6936	Curriculum, Assessment, and Instruction to Improve Learning	
Total Semester Hours		43

## 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.
- analyze social issues related to Health Care Delivery Systems and nursing education.

## 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
- 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 Catalog* 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: 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 is February 1. The FNP option is a cohort-based program (beginning each Fall).

## Master of Social Work Program Director

Dr. Sherri Harper Woods

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## 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. A one-year (39 hour) 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. One-year (39 hour) programs are also available for students that have completed a Bachelor of Social Work degree at the Lorain and Lakeland community college sites. Face-to-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 2012. The program will be due for reaccreditation in 2020. 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. Seventy-six percent of graduates who took the exam passed in 2015.

## 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. Application packets are available through the Department of Social Work or Graduate Admissions in Coffelt Hall. Students who are admitted may enter the program only during the fall semester of each academic year.

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;
- three letters of recommendation completed on official forms. Recommendations 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
- an optional personal interview and/or additional information as requested by the program's admission committee.
- For non-B.S.W. applicants, one approved social work course OR one course each in the following is required: psychology, sociology, or political science.

### 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.

### One year Program ADMISSION (39 semester hours)

The One Year Program is accelerated for highly qualified graduates of the Council on Social Work Education (C.W.S.E.) accredited Bachelor of Social



Work (B.S.W.) programs. The One Year 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.

Applicants seeking admission to the OYP 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.W.S.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;
- have 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., Associate 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

**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

**Sherri Harper Woods**, D.M., Assistant Professor  
Integrating spirituality into the therapeutic healing process; trauma-informed care; service learning and civic engagement

## Regular 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: Regular Program

COURSE	TITLE	S.H.
<b>Foundation Courses</b>		
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 6908	Research	3
SCWK 6909	Field Education 2	3
<b>Advanced Courses</b>		
SCWK 7000	Advanced Direct Practice 1	3
SCWK 7002	Trauma Informed Practices in Social Work	3
SCWK 7004	Practice Evaluation	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 Hours		60

## One Year Program (39 hours)

PROGRAM PROGRESSION: (main, Lakeland and Lorain campuses)

This program is completed in 3 consecutive semesters beginning the summer semester. Courses are advanced social work courses combined with three semesters of field practicum. Courses are offered Saturdays, weekday evenings and online. Field internship continues through the summer, fall and spring semesters. The advanced field practicum is designed to provide learning experiences that promote and integrate the achievement of advanced program objectives.

## Course Outline: One Year Program (39 hours)

COURSE	TITLE	S.H.
Summer Semester		
SCWK 6910	Integrated Foundation	3
SCWK 7008	Social Work and the DSM	3
SCWK 6909	Field Education 2	3
Fall Semester		
SCWK 7000	Advanced Direct Practice 1	3
SCWK 7002	Trauma Informed Practices in Social Work	3
SCWK 7003	Theory and Practice of Supervision	3
Graduate Elective		
SCWK 7009	Field Education 3	3
Spring Semester		
SCWK 6906	Business Skills for Social Workers	3
SCWK 7010	Advanced Direct Practice 2	3
SCWK 7004	Practice Evaluation	3
SCWK 7012	Field Education 4	3
SCWK 7013	Capstone	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 5820 Social Policy 3 s.h.

Review of the programs, structure, and functions of social services including historical development and social, political, and economic issues. Application of scientific method to analyze and develop social work policies designed to achieve social work goals and purposes.

**Prereq.:** SCWK 2641, POL 1560.

### SCWK 5822 Social Work Methods with Organizations and Communities 3 s.h.

In-depth analysis of problem-solving strategies and skills in working with organizations and communities. Theory and research relating to practice. Social work purpose, functions, and values are addressed from the systems perspective.

**Prereq.:** SCWK 3736.

### SCWK 5823 Cultural Diversity in Practice 3 s.h.

Emphasis on understanding the experiences, beliefs, and inherent problems of racial and ethnic minority groups. Focuses also on populations distinguished by socioeconomic status, gender, age, sexual orientation, religion, and physical or mental disability. Application of theories, differential assessment, and intervention skills necessary for effective social work practice.

**Prereq.:** SCWK 3736 or permission of instructor.

### 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 problem-solving 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.:** SCWK 6900.

**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 problem-solving 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 6908 Research 3 s.h.**

A review of the scientific method, quantitative and qualitative research strategies, and related concepts. Principles of conceptualization, research design, sampling, instrumentation, descriptive and inferential data analysis, scientific report writing, and the significance of research for social work practice will be emphasized. Attention will be placed on developing strengths-based performance indicators.

**Prereq.:** SCWK 6900.

**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.:** SCWK 6907.

**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.:** SCWK 6901.

**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 trauma-informed 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.:** SCWK 7008 or concurrent.

**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 strengths-based performance indicators.

**Prereq.:** SCWK 6908.

**SCWK 7004 Practice Evaluation 3 s.h.**

This course examines social work with the elderly through critical analysis of policy, specific human behavior content, and research. Students will critique practice interventions, program design, and service strategies specific to social work practice in settings for the aged.

**SCWK 7006 Social Work in Aging 3 s.h.**

This course examines social work in child and family settings through critical analysis of policy, specific human behavior content, and research. Students will critique practice interventions, program design, and service strategies specific to social work practice in child and family settings.

**SCWK 7007 Social Work in Child and Family Settings 3 s.h.**

This course examines social work in mental health settings through critical analysis of policy, specific human behavior content, and research. Students will critique practice interventions, program design, and service strategies specific to social work practice in mental health settings.

**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.

**Concurrent:** SCWK 7010.

**SCWK 7012 Field Education 4 3 s.h.**

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.

**Concurrent:** SCWK 7012.

**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.**

## Certificate in Aging Studies

### Department of Sociology, Anthropology and Gerontology

Daniel J. Van Dussen, Ph.D.

440 DeBartolo Hall

(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	Service Delivery Aging Policy	3
GERO 6906	Perspectives in Gerontology	3
GERO 6960	Epidemiology of Aging	3
GERO 6998	Anatomy and Physiology of Aging	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	Epidemiology of Aging	3
GERO 6906	Perspectives in Gerontology	3
GERO 6915	Service Delivery Aging Policy	3
Semester Hours		9

**Spring**

GERO 6998	Anatomy and Physiology of Aging	3
GERO 7094	Selected Topics	3
SOC 6905	Social Gerontology	3
Semester Hours		9
Total Semester Hours		18

## Certificate in Applied History

### Department of History

Dr. Donna M. DeBlasio, Certificate Director  
537 DeBartolo Hall  
(330) 941-3453  
dmdeblasio@ysu.edu

#### Certificate Description

The certificate in applied history is designed both to give students a grounding in American history and historical research at the graduate level and to introduce them to ideas and techniques useful in the field. Students earning the certificate may find work with state or local preservation groups, museums, or government agencies. Students choose from among three possible tracks described below.

#### 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.
Select one of the following tracks:		
<b>Track I: History Preservation</b>		
HIST 5806	American Architectural History 1	
HIST 5807	American Architectural History 2	
HIST 5810	Conservation of the Historic Built Environment	
HIST 6942	Applied History	
HIST 6943	Practicum in Applied History	
HIST 6944	Applied History Internship	

**Track II: Museum Studies**

HIST 6941	American Material Culture
HIST 6942	Applied History
HIST 6943	Practicum in Applied History
HIST 6944	Applied History Internship
HIST 6955	Museum Curation and Interpretation 1
HIST 6956	Museum Curation and Interpretation 2

**Track III: Applied History Sequence**

HIST 5806	American Architectural History 1
HIST 6940	Oral History
HIST 6941	American Material Culture
HIST 6942	Applied History
HIST 6944	Applied History Internship
HIST 6946	Historical Editing

Total Semester Hours

18

## Learning Outcomes:

Students will demonstrate the ability to translate traditional historical scholarship into media meant primarily for non-academic audiences

## Certificate in Biological Sciences

### Department of Biological Sciences

Dr. Mark Womble, Graduate Program Director  
4063 Ward Beecher Science Hall  
(330) 941-4727  
mdwomble@ysu.edu

#### Certificate Description

The Graduate Certificate in Biological Sciences provides CCP high school teachers who teach General Biology courses for college credit the required 18 credit hours of graduate-level Biology content courses.

#### Admission Requirements

- A previously obtained undergraduate degree from an accredited college or university, with a minimum cumulative grade point average of 2.7.
- Must be a licensed science teacher.
- Have an undergraduate degree that included a minimum total of 20 credit hours in Biology, Chemistry, and/or Physics.
- Submission of two (2) letters of recommendation.

#### Certificate Requirements

The Certificate requires the completion of at least 18 credit hours of Biology graduate courses. At least 9 credit hours of this coursework must be at the 6900 level. All courses must be graded and all course grades must be at the A or B level.

Students should consult with the departmental Graduate Director to decide which Biology courses best meet his/her educational goals and to devise a curricular plan for completion of the Certificate program.

## Certificate in Economics

### Department of Economics

Dr. Tod Porter, Chair  
303 DeBartolo Hall  
(330) 941-3428 (<http://catalog.ysu.edu/graduate/graduate-programs/certificate-economics/>;tel:(330)%20941-3428)  
tsporter@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
ECON 6945	Public Finance	3
Two 3-hour courses at the 6900 or 5800 level (the 5800-level classes must be taken as a graduate student)		6
Total Semester Hours		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.

## Certificate in English Department of English

Dr. Lucas Hardy, Graduate Director  
240 DeBartolo Hall  
330-941-3420  
lhardy01@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 following:		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	
Total Semester Hours		18

## Certificate in Enterprise Resource Planning

### Department of Management

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

## 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.
MGT 6947	Managing Information & Technology	2
MGT 6944	Managing Business Processes	2
MGT 6945	Business Process Integration	2
MGT 6946	Supply Chain Management	2

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.).

Total Semester Hours		8
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## Certificate in Environmental Studies Department of Geological and Environmental Sciences

Dr. Felicia Armstrong  
2080 Moser Hall  
(330) 941-1385  
farmstrong@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.
AHLT 4831	Industrial Hygiene	3
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.
<b>Core courses (taken by certificate candidates in both tracks)</b>		
ENST 6900	Advanced Environmental Studies	3
ENST 6901	Sources of Contamination	3
<b>Risk Management Track</b>		
ENST 6930	Risk Management	3
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	Risk Assessment	
Total Semester Hours		15

### Industrial/Institutional Management Track

COURSE	TITLE	S.H.
<b>Core courses (taken by certificate candidates in both tracks)</b>		
ENST 6900	Advanced Environmental Studies	3
ENST 6901	Sources of Contamination	3
<b>Industrial/Institutional Management Track</b>		
ENST 6920	Environmental Compliance	3
ENST 6921	Industry/Institutional Management for the Environmental Professional	3
Select one of the following:		3
ENGR 6925	Applied Environmental Management	
ENST 5800	Environmental Impact Assessment	

ENST 5830	Risk Assessment
ENST 6910	Environmental Management Systems Standards (ISO 14001)
ENST 6930	Risk Management
Total Semester Hours	15

## Certificate in Health Care Management

### Department of Health and Human Services

Dr. Joseph Lyons  
1086 Cushwa Hall  
(330) 941-3658  
jplyons@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.

## 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.

## 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 Methodology	
	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, students must submit three letters of reference:

- 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:		
CJFS 6942	Research and Statistics in Health and Human Services	6

And one of the two MGT groups below:

FIN 6923	Corporate Financial Management	
FIN 6902	Financial Accounting and Finance for Decision Making	
Both 6923 & 6902 Together		
or		
MGT 6941	Managing Organizational Talent	
MGT 6930	Managing and Leading in Organizations	
Both 6941 & 6930 Together		
Must complete 9 semester hours of the following:		9
HHS 6918	Program Planning and Evaluation	
HHS 6922	Planning and Fiscal Management	
HHS 6959	Foundation and Planning	
HHS 6960	Implementation and Evaluation	
Must complete 3 semester hours of the following:		3
HHS 6949	Community Health Practice	
HHS 6953	Health Behavior	
HHS 6958	Health Services Issues	
Total Semester Hours		18

## Certificate in Instructional Communication

### Department of Communication

Dr. Rebecca M.L. Curnalia

2023 Bliss Hall  
(330) 475-9295  
rncurnalia@ysu.edu (jplyons@ysu.edu)

#### Certificate Description

This 18-semester hour, six-course certificate is designed for people who have earned, or are in the process of earning, a Master's Degree who also need focused coursework to teach college-level communication courses.

#### 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.
CMST 6945	Communication for the Classroom Teacher	3
CMST 6980	Applied Research Methods	3
CMST 6950	Computer Mediated Communication Research	3
CMST 5860	Persuasion and New Media	3
Choose two of the following		6
CMST 5898	Seminar	
CMST 5852	Conflict Management and Negotiation	
CMST 6953	Group Dynamics: Theory and Research	
CMST 6957	Organizational Communication Research	
CMST 6991	Communication Problems: Independent Study	
Total Semester Hours		18

## Certificate in Literature for Children and Young Adults

### Department of English

Dr. Lucas Hardy, Graduate Director  
240 DeBartolo Hall  
330-941-3420  
lhardy01@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
Complete one course from the following, if the topic relates to children's or young adult literature, with permission of the certificate director:		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	
Or students may elect to take one course in a related discipline (e.g., psychology, history, education, art) when content is appropriate, with permission of the certificate director.		
Total Semester Hours		12

## Certificate in Mathematics

### Department of Mathematics and Statistics

Dr. Thomas Wakefield  
618 Lincoln Building  
(330) 941-1395  
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 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.

## Certificate in Professional and Technical Writing

### Department of English

Dr. Lucas Hardy, Graduate Director  
240 DeBartolo Hall  
330-941-3420  
lhardy01@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.
<b>Required Courses</b>		
ENGL 6943	Technical Communication	3
ENGL 6944	Document Design and Production	3
Select two courses from Group A or one course from each Group:		6
<b>Group A</b>		
ENGL 6945	Theory of Professional and Technical Communication	
ENGL 6949	Professional and Technical Editing	
ENGL 6953	Publications Issues and Management	
ENGL 6992	Professional Communication	
<b>Group B</b>		
ENGL 6950	Sociolinguistics	
ENGL 6958	English Grammar	
ENGL 6993	Discourse Theory	
Total Semester Hours		12

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.

## Certificate in Teaching English to Speakers of Other Languages (TESOL)

### Department of English

Dr. Lucas Hardy, Graduate Director  
240 DeBartolo Hall  
330-941-3420  
lhardy01@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

## Certificate in the Teaching of Literature

### Department of English

Dr. Lucas Hardy, Graduate Director  
240 DeBartolo Hall  
330-941-3420  
lhardy01@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.
<b>Required Courses</b>		
ENGL 6906	Teaching of Literature	3
ENGL 6902	Literary Thought	3
Students must take one course from two of the following three areas:		6
<b>British Literature</b>		
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	
<b>American Literature</b>		
ENGL 6915	Early American Studies	
ENGL 6917	Nineteenth-Century American Studies	
ENGL 6922	Twentieth-Century American	
ENGL 6923	Working Class Literature	
<b>Multicultural Literature</b>		
ENGL 6963	Perspectives in Multicultural Studies	
Total Semester Hours		12

## Certificate in Teaching of Writing

### Department of English

Dr. Lucas Hardy, Graduate Director  
240 DeBartolo Hall  
330-941-3420  
lhardy01@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	Technical Communication	
ENGL 6956	TESOL Methods	
ENGL 6976	Studies in English Education <sup>1</sup>	
Select one of the following:		3
ENGL 6950	Sociolinguistics	
ENGL 6958	English Grammar	
ENGL 6993	Discourse Theory	
Total Semester Hours		12

<sup>1</sup> If topic applied to rhetoric and composition.

## Certificate in Nurse Education

### Department of Nursing

Dr. Valerie O'Dell, Certificate Director  
3132 Cushwa Hall  
(330) 941-2177  
vmodell@ysu.edu

## Certificate Description

The five-course (16 – 18 s.h.) nurse education certificate is designed to prepare the post-masters prepared nurse with opportunities to further their education and develop and refine new skills that will enhance their professional development as nurse educators.

The certificate nurse educator program is not a degree program. This program is designed to enhance the professional development of registered nurses by providing education and training that prepares them for nurse educator roles and teaching positions in academic and service settings. At the completion of this certificate program, the student would be eligible to sit for the National League for Nursing Certified Nurse Educator examination.

## Admission Requirements

- MSN degree in Nursing from an accredited college/university
- Official transcript from each college or university attended (except YSU)
- Overall grade point average of 3.0 in graduate work
- Current Ohio Registered Nurse licensure or eligibility for Ohio licensure as a registered nurse
- Current CPR certification and current immunization
- Personal statement describing career goals
- Three letters of reference: one each from a faculty member, an employer, and a colleague
- Computer competency that includes word processing skills and the ability to communicate electronically
- Letter of intent (300 words) maximum stating one's professional career goals and how graduate education in nursing will help fulfill said goals

## Certificate Requirements

The Nurse Education Certificate Program consists of 16-18 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 a required capstone practicum of 3-5 semester hours.

COURSE	TITLE	S.H.
NURS 7018	Nursing Curriculum Design	3
NURS 7019	Nursing Instructional Methods	3
NURS 7020	Evaluation in Nursing Education	3
NURS 7021	Nurse Educator Role	4
NURS 7022	Nurse Educator Role Practicum	3-5
Total Semester Hours		16-18

## 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

COURSE	TITLE	S.H.
AMER 5850	Class and Culture	3
AMER 6910	Introduction to Working-Class Studies	3
AMER 6970	Teaching Working-Class Studies	3
ENGL 6923	Working Class Literature	3
HIST 6939	Labor in US History	3
HIST 6945	Interpretation and Preservation of the Industrial Built Environment	3
MGT 5845	Work in America	3

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.

## Educational Licensure

### Counseling, School Psychology and Educational Leadership

Dr. Charles Vergon  
4103 Beeghly Hall  
(330) 941-1574  
cbvergon@ysu.edu

### Post-master's Licensure Requirements

Candidates for Ohio administrative license must have completed the 30 semester hours for the M.S. in Education degree in Educational Administration as required by YSU or its equivalent as evaluated by the Department of Educational Foundations, Research, Technology, and Leadership.

### 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 course work is entirely clinical in nature, consisting of two courses comprising 6 semester hours. The courses are designed to afford candidates the opportunity to apply the content knowledge from their course work and practice the skills necessary to effective leadership. Across the two 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, in the second clinical practice 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 6975	Introduction to Administration Clinical Experience	3
EDAD 7022	Field Experience (Elementary 7022E; Middle 7022M; or Secondary 7022S)	3
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; and have two years of successful teaching under a professional teaching license at the same level as the administrative license being sought. In addition, candidates must have a passing score on the state-prescribed administrative licensure exam for the principalship.

## 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 6922	Principles of Instruction	3
TCED 6934	Assessment and Accountability	3
TCED 6936	Curriculum, Assessment, and Instruction to Improve Learning	3
SPED 6900	Issues, Trends & Foundations in Special Education	3
SPED 7077	Leadership in Special Education	3
EDAD 7014	Systematic Use of Information for Continuous School Improvement	3
EDAD 7018	School Discipline and Student Support Services: Policies, Programs, and Prevention Strategies	3
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 Leadership: Models and Processes	3
EDAD 6949	Legal and Ethical Issues in Public Administration	3
EDAD 6952	School Finance, Resource Planning, and Management	3
EDAD 6954	Educational Marketing and Community Relationships	3
EDAD 6955	Professional Development and Human Resources	3
EDAD 6975	Introduction to Administration Clinical Experience	3
EDAD 7014	Systematic Use of Information for Continuous School Improvement	3
EDAD 7018	School Discipline and Student Support Services: Policies, Programs, and Prevention Strategies	3
EDAD 7040	Clinical Practice for the Administrative Specialist	3
Total Semester Hours		30

Individuals qualifying for licensure at the Elementary or Secondary level are also issued licensure at the Middle School level.

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 Educational Foundations, Research, Technology, and Leadership at YSU, complete the following course sequence, and meet any other Ohio State Department of Education requirements.

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 at Leadership	3
EDAD 7050	Clinical Experience: Superintendency	3
Total Semester Hours		15

## 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 33 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:

- a score of at least 143 on Praxis II Specialty Test #0411 in Educational Leadership: Administration and Supervision; or
- a 163 score on Praxis Specialty Test #6011 in School Leadership Licensure Assessment (SLLA); and
- satisfy any other Pennsylvania Department of Education Requirements, plus:

Completion of 33 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 6931	Leadership in Educational Organizations: Theory to Best Practices	3
EDAD 6947	School Building Leadership: Models and Processes	3
EDAD 6949	Legal and Ethical Issues in Public Administration	3
EDAD 6952	School Finance, Resource Planning, and Management	3
EDAD 6954	Educational Marketing and Community Relationships	3
EDAD 6955	Professional Development and Human Resources	3
EDAD 7014	Systematic Use of Information for Continuous School Improvement	3
TCED 6936	Curriculum, Assessment, and Instruction to Improve Learning	3
SPED 7077	Leadership in Special Education	3

Select one clinical experience course as appropriate to the licensure level being sought:

EDAD 7022	Field Experience (Elementary 7022E; Secondary 7022S)	3
Total Semester Hours		33

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.
2. 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.
3. 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;
- 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 score of at least 160 on the School Superintendent Assessment Exam #6021;
- all other State of Pennsylvania Department of Education requirements must be met;
- plus completion of the 57 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 6915	Learning, Teaching, and Instructional Leadership	3
EDAD 6947	School Building Leadership: Models and Processes	3
EDAD 6949	Legal and Ethical Issues in Public Administration	3
EDAD 6952	School Finance, Resource Planning, and Management	3
EDAD 6954	Educational Marketing and Community Relationships	3
EDAD 6955	Professional Development and Human Resources	3
EDAD 7014	Systematic Use of Information for Continuous School Improvement	3
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	3
EDAD 7050	Clinical Experience: Superintendency	3
FOUN 6901	Philosophical Analysis of Education	3
FOUN 6902	Sociological Bases of Education	3
FOUN 6904	Introduction to Educational Research	3
FOUN 6905	Educational Challenges in Historical Perspective	3
TCED 6936	Curriculum, Assessment, and Instruction to Improve Learning	3
TCED 6946	Supervision of Instruction	3
TCED 6951	Interpersonal Communications for Educators	3
Total Semester Hours		57

## Post-masters Family Nurse Practitioner Certificate Program

### Department of Nursing Certificate Director

Dr. Valerie O'Dell, Certificate Director  
3132 Cushwa Hall  
(330) 941-2177  
vmodell@ysu.edu

### Certificate Description

The 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 which will enable them to provide direct primary care to individuals and families. 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.

## Family Nurse Practitioner (FNP) Option Curriculum

COURSE	TITLE	S.H.
NURS 6903	Advanced Pharmacology	3
NURS 6904	Advanced Health Assessment	3
NURS 7003	Role Development	3
NURS 7004	Role Development Practicum	5
NURS 7024	Family and Women's Health	3
NURS 7025	Family and Women's Health Practicum	4
NURS 7026	Infant, Child and Adolescent Health	3
NURS 7027	Infant, Child and Adolescent Health Practicum	5
NURS 7028	Adult and Older Adult Health	3
NURS 7029	Adult and Older Adult Health Practicum	5
Total Semester Hours		37

Students will complete 570 hours of supervised clinical practice as part of this certificate option for national certification eligibility.

## Post-Master's Adult-Gerontology Acute Care Nurse Practitioner

### Department of Nursing Certificate Director

Dr. Valerie O'Dell, MSN Director  
3132 Cushwa Hall  
(330) 941-2177  
vmodell@ysu.edu

Dr. Cynthia Shields, AG-ACNP Coordinator  
2328 Cushwa Hall  
(330) 941-1345  
cmshields@ysu.edu

### Certificate Description

The Adult Gerontology – Acute Care Nurse Practitioner (AG-ACNP) Master of Science in Nursing (MSN) Certificate program option 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 to



enable them to provide direct acute care to adult and older adult individuals and families.

Graduates of this program will be qualified and eligible to take the American Nurses Credentialing Center and/or the American Academy of Nurse Practitioners AG-ACNP certification examinations. Following national certification, graduates are also qualified to be recognized as an adult gerontology – acute care nurse practitioner and granted prescriptive authority through the state Board of Nursing.

<b>COURSE</b>	<b>TITLE</b>	<b>S.H.</b>
NURS 6903	Advanced Pharmacology (unless completed previously)	3
NURS 6904	Advanced Health Assessment (unless completed previously)	3
NURS 7037	Adult-Gero Acute Care 1	3
NURS 7038	Adult-Gero Acute Care 1 Practicum	4
NURS 7039	Adult-Gero Acute Care 2	3
NURS 7040	Adult-Gero Acute Care 2 Practicum	5
NURS 7041	Adult-Gero Acute Care 3	3
NURS 7042	Adult-Gero Acute Care 3 Practicum	5
Total Semester Hours		29

# WORKSHOPS

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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 in the College of Graduate Studies as non-degree students. 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.

## TRANSFER CREDITS

Transfer hours from an accredited institution will be considered for acceptance at the time of application/acceptance to the College of Graduate Studies. After admission to a program of study, a student who wishes to attend another university to complete coursework toward a YSU graduate degree must complete the Request for Transient Status form available on the College of Graduate Studies website in order to transfer credits to a YSU degree. Every transfer course must either replace a required course of the program or, if not a direct replacement, integrate satisfactorily into the student's program. While transfer of a course might generate excess hours, such hours may not count toward degree requirements unless they replace a complete course in the program.

An accredited institution is one that is approved or accredited by the appropriate regional accrediting agency (e.g., Higher Learning Commission) for graduate-level work.

Credits for courses in which grades of S or CR were received will not be transferred. The number of transfer credits to be accepted in each case will be determined by the graduate dean upon evaluation and recommendation by the department of the student's major. It is the responsibility of the student to initiate a request for the approval of transfer credits. Transfer hours are not included in the calculation of the student's cumulative grade point average.

In general, workshop format courses are not acceptable for transfer. Professional development workshops are not acceptable. However, if the workshop fulfills the following requirements, credit may be considered for transfer to Youngstown State University:

- The workshop must be taught as part of a master's degree curriculum of the university at which the course was taken.
- The workshop should consist of a minimum of 12.5 contact hours per semester hour.
- The workshop must include exposure to the disciplinary research literature appropriate to the course.
- The workshop must include the opportunity for outside work, such as term or research papers or other major assignments appropriate to a graduate course.
- Credits for courses in which grades of S or CR were received will not be transferred.

## 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 doctoral or programs requiring 90 or more semester hours

## Military Credit

Graduate courses, approved by the American Council of Education to be equivalent to a graduate level course, will be considered by the graduate program to determine if transfer credit will be granted.

## MBA Credit from Chinese University of Petroleum

The MBA program may accept up to 14 hours of transfer credit from the Chinese University of Petroleum.

# REGISTRATION

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## Advisement

Before initial registration, the student would be well advised to consult with the faculty member in charge of the program to which the student has been admitted or with an assigned advisor for advice in developing a program of study that leads to the desired degree. The ultimate responsibility for selection of graduate courses, based upon the requirements of the student's program as set forth in the Catalog, remains with the student. Continued consultation with the advisor is encouraged. Because of the nature of certain programs, an advisor may require consultation before each registration.

## Registration Procedure

All Youngstown State University class registration takes place online through the MyYSU Portal (<http://my.yzu.edu>). Registration days and times are determined by a student's classification and earned hours completed. Registration dates and appointment times for current students are determined by the Office of the Registrar and available to view on the MyYSU Portal under e-Services for Students - Important Dates. All significant dates are also listed on the Registrar's website and on the MyYSU Portal announcements for each specific semester. Registration requires that the student agrees to pay all tuition and fees associated with the registration. Failure to withdraw during the 100% refund period does not release the student from his or her financial obligation incurred by registration. Assistance with all registration related functions can be found at the Student One Stop located on the second floor of Meshel Hall (Phone: (330) 941-6000, Email: [onestop@ysu.edu](mailto:onestop@ysu.edu)).

## Change of Registration

Students may change their registration up to the last day to add a class. All dates are available on the /MyYSU/ Portal.

Withdrawal from a course must be accomplished through the online registration system. Failure to attend class or notification to an instructor is insufficient. A grade of F will be recorded unless a student officially withdraws.

## Complete Withdrawal of Registration

The student who wishes to withdraw from all classes in a particular semester must also process this through the /MyYSU/portal (<http://my.yzu.edu>). If a student withdraws from all classes during the first two weeks of the semester, the academic record will contain the statement, "Student completely withdrew during the first two weeks of the semester."

## Cross-Registration of Courses Among Northeast Ohio Public Universities

Under specific circumstances, a graduate student may take one or more graduate courses at Cleveland State University, Kent State University, The University of Akron, NEOMED, Ohio University, or Youngstown State University without registering as a transient student at the university delivering instruction. The course should contribute to the student's program of study and be unavailable when needed to complete the student's program at the student's home institution. The student must be in good standing (GPA > 3.0) and be within the time limits for completion of the program. The graduate program unit at the student's home institution will establish a graduate special topics or independent study course identification capable of being tagged by the home university with a title that will correspond to the course title at the host university and with the initials of that university (i.e., CSU, KSU, or UA). Registration for such a course is controlled by the home department and will be permitted only upon receipt of the Approval for Acceptance of Course Work at Northeast Ohio Public Universities form, which is available on the graduate school's website: [www.yzu.edu/gradcollege](http://www.yzu.edu/gradcollege) (<http://www.yzu.edu/gradschool>). Any department that has no established special topics or independent study course may not participate in this cross-registration program.



# OTHER REGULATIONS

## Graduate Courses

Graduate credit may be earned in the following courses:

- 8000-level courses, which are for doctoral students only
- 6900- and 7000-level courses, which are open to graduate students (see Graduate Courses for Undergraduates). At least one-half of the credits applied toward the master's degree must be earned in courses in the 6900- and 7000-series.
- Upper-division undergraduate swing courses (5800-level), in which the student may enroll for graduate credit only

Only certain upper-division undergraduate courses may be taken for graduate credit. Those in this category are listed in the Courses section of this catalog. To earn graduate credit in an upper-division course, the student must be admitted to the College of Graduate Studies before the course is taken. Graduate students in undergraduate courses that offer graduate credit will be required to pursue the subject matter in greater depth than the undergraduate student.

Graduate students may register for 4000-level or lower courses, but these courses do not apply toward the requirements of a graduate degree. Although the grades received and semester hours for such courses appear on the student's record, the hours and quality points are not included in the student's cumulative totals.

## Seminar

A seminar generally consists of a group of advanced students studying a subject under a professor, each making some pertinent contribution and all exchanging results through informal lectures, reports, and discussions.

## Research Using Human or Animal Subjects

Research using human or animal subjects requires prior approval by the appropriate committee (YSU Human Subjects Research Committee or YSU Institutional Animal Care and Use Committee). Assistance with the process of obtaining approval may be obtained from the Office of Grants and Sponsored Programs.

## Thesis or Dissertation

Certain programs accept or require a thesis or dissertation as partial fulfillment of the requirements for the degree. Students are asked to initiate an online form as soon as the members of the thesis committee are identified. Students follow the style manual used by the field as determined by the department. The deadline for presenting one copy on regular paper and all signed signature pages on acid-free cotton bond paper and the Originality of Thesis/Dissertation Verification form for approval to the Dean of College of Graduate Studies is:

- Fall and Spring semesters:
  - dissertations submitted by the Monday of the 14<sup>th</sup> week of class
  - theses submitted by the Monday of the 15<sup>th</sup> week of class
- Summer term:
  - dissertations submitted by the Monday of the 10<sup>th</sup> week of the full term
  - theses submitted by the Monday of the 11<sup>th</sup> week of the full term

Additional thesis and dissertation presentation information is available on the College of Graduate Studies website and individual departments. Research using human or animal subjects requires prior approval by the appropriate

committee (YSU Human Subjects Research Committee or YSU Institutional Animal Care and Use Committee).

The oral defense is a public presentation and must be advertised within the college.

## Second Master's Degree

A student who has a master's degree from YSU and desires a second master's degree must earn a minimum of 12 semester hours of credit in addition to the total that the student had when requirements for the first degree were completed, and he or she must complete the requirements for another graduate program. Students with a master's degree from another university will be limited to the maximum of transfer credit hours as determined by the transfer credit policy.

## Interrupted Enrollment

Students who interrupt their attendance for three or more semesters (one calendar year) must apply for readmission as former students at least two weeks before late and final registration. Graduate students who fail to take courses or otherwise pursue their graduate education for one year will be readmitted only under regulations at the time of reapplication and after review by the department for approval of the readmission.

## Full-Time Status

Full-time students carry nine or more semester hours for credit. Graduate students who complete less than nine hours per semester may lose eligibility for federal financial aid as a full-time student.

## Reduced Load for Employed Students

The College of Graduate Studies recommends that the employed student carry less than a full academic load as determined in consultation with his or her academic advisor.

## Graduate Courses for Undergraduates

The Application by Undergraduate to Enroll in a Graduate Course form is available in the College of Graduate Studies office.

An undergraduate student who is enrolled as a senior at Youngstown State University or at another member institution of the Academic Alliance (currently including Lake Erie College, Slippery Rock University of Pennsylvania, Thiel College, Walsh University, and Westminster College) or another institution of higher education with which YSU has a formal academic agreement at the graduate level, and who has a grade-point average of at least 2.7 may enroll in 5800-, 6900- and 7000- level graduate courses, provided the total schedule for the semester (including undergraduate courses) does not exceed 15 semester hours. Before registering for courses, the student must have the approval of the Graduate Program Director in the program where the credit will be applied, the course instructor, and the Dean of The College of Graduate Studies. The credit earned may be used for graduate credit at YSU only after the student is admitted to the College of Graduate Studies and the credit is accepted by the department in which the student continues graduate work. (Such coursework intended for graduate credit cannot count toward fulfillment of the requirements for a bachelor's degree at Youngstown State University.) The maximum amount of such credit that will be accepted at Youngstown State University is 9 semester hours.

Students in accelerated programs will be accommodated to allow completion of degree requirements as specified in the program curriculum.

## Academic Standards

A cumulative grade point average of at least 3.0 (on a 4.0 scale) is required for graduation. All graduate courses taken at YSU are included in the grade point average calculation (see Grading System for grades less than C). Good

academic standing for graduate students is a cumulative grade point average of at least 3.0 (on a 4.0 scale) for all graduate credit courses taken at YSU.

## Satisfactory Academic Progress

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).

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.

## Academic Suspension

A graduate student who is not maintaining satisfactory academic progress as determined by the graduate academic program director or department chairperson and graduate dean may be excluded from registration and dropped from the program in which he or she is enrolled. Such action constitutes academic dismissal from the College of Graduate Studies.

Academic suspension for a student with regular admission is automatic if:

- The semester grade point average is below 3.0 after one semester student registered "not in good standing";
- The student fails to pass a comprehensive exam after three tries.

A provisionally admitted graduate student must maintain a minimum grade point average of 3.0 (on a 4.0 scale). A provisional student whose GPA falls below a 3.0 will immediately be dismissed.

Any student in non-degree status whose cumulative grade point average drops below the minimum (3.0) will be prohibited from enrolling in further graduate coursework.

Registration for any session or continuous registration during a full summer counts as one semester for these purposes.

A graduate program may utilize additional academic standards to determine satisfactory academic progress and/or standards for academic suspension; however, such standards must be distributed in writing to all graduate students in the program and must be filed and approved by the dean of The College of Graduate Studies.

## Readmission Procedures

- Under exceptional circumstances and with the approval of the Dean of The College of Graduate Studies, a program may readmit a suspended student. In such cases, the normal six-year limitation on coursework shall be applied.
- Graduate students suspended for failing to maintain satisfactory academic progress may appeal their suspensions within one year in writing to the Graduate Council. The decision of the Council is final.

- After a period of one year, a graduate student who has been suspended for academic reasons may reapply to the College of Graduate Studies in order to begin a new degree program or to pursue studies in non-degree status. A readmitted graduate student is not permitted to register for any courses offered by the program from which he or she was academically suspended.

## Grading System

The following grading system is used in reporting a final evaluation of the work of graduate students in courses or thesis research: A, B, C, D, and F. The grade point equivalents are 4, 3, 2, 1, and 0, respectively. A graduate student may not elect to take a course under the credit/no credit option.

Grades of D and F carry no graduate credit but will be used to determine the student's grade point average. Failure will normally be indicated by a D; a grade of F indicates that the student has not achieved even a minimum grasp of the essentials of the course. 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.

Upon transfer to a new graduate program, a student with concurrence of the advisor, program director and department chair, may petition to the dean of Graduate Studies for the exclusion from the calculation of the student's grade point average previous courses that do not apply to the new degree program. The grades will be removed from the GPA calculation but will remain on the transcript. In no case may courses be excluded from the calculation of the grade point average once a graduate degree has been conferred.

Graduate workshops are graded on an S/U (satisfactory/unsatisfactory) basis.

An incomplete grade of I may be given to a student who has been doing satisfactory work in a course but, for reasons beyond the control of the student and deemed justifiable by the instructor, had not completed all requirements for a course when grades were submitted. A letter grade may not be changed to an I (Incomplete) after the term has ended and grades have been recorded. A written explanation of the reason for the I must be forwarded by the instructor to the Office of Records for inclusion in the student's permanent record, with copies to the student and department chairperson. For fall term courses, the final date to complete an I will be:

- March 1 of the following term;
- for spring term courses, September 1;
- for all summer term courses, October 1.

With approval by the instructor and the dean of the college where the course is taught, the completion date may be extended. Courses not completed by the appropriate date will be converted to an F.

A grade of W represents a withdrawal properly processed at any time from the end of the full-refund period through the last day to withdraw with a W (as published in the Academic Calendar for each semester). Withdrawal after the designated date (or an improper withdrawal) is recorded as F. Withdrawal thereafter (or improperly done, at any time) is recorded as F. If the grade resulted from circumstances over which the student had no control, the student may petition the dean of the College of Graduate Studies for a late withdrawal. Any grade of F assigned because of absence may be reviewed upon petition to the dean of The College of Graduate Studies. Where withdrawals change the student's status from full-time to part-time, the student immediately forfeits any privileges contingent upon full-time status, and all interested parties will be notified by the appropriate university officials.

In the case of thesis work, independent study, and other courses where research or scholarship is still in progress at the time grades are to be reported, a PR may be reported in place of a conventional grade. The PR grade is intended to indicate that it is the nature of the scholarship rather than the student's ability to complete the work that is preventing the issuance of a conventional grade. A PR grade must be converted to a regular grade prior

to graduation. However, a PR grade can remain on the student's permanent record if the course is not needed. A PR grade in and of itself will not prevent a student from graduating.

AU signifies that the student was enrolled in the class as an auditor.

## Grade Changes

Applications for grade changes may be secured from the Office of Records, must be completed by the instructor, and must contain the signature of the dean of The College of Graduate Studies unless the change is from incomplete (I) or progress (PR). All grade changes must be submitted to the Office of Records by the dean or instructor; they will not be accepted from the student. In no case may a grade be changed for the purpose of changing the grade point average of the completed degree after a student has received a graduate degree.

## Intrauniversity Transfer (Change of Curriculum)

A student must request in writing a transfer from one graduate program to another. A transfer is not complete until an advisor in the program to which the student is transferring has been appointed and has accepted the student as an advisee, and when the change has been reported to and approved by the dean of The College of Graduate Studies. In such cases of transfer, courses taken in the original curriculum that also apply toward the degree in the new curriculum will be accepted. The student's academic record and grade point average will reflect all graduate courses taken.

## Auditing Courses

A graduate student may register for and attend any course as an auditor. An auditor is not held responsible for the regular classwork, class attendance, and preparation of assignments and receives no credit for the course. The student pays the regular tuition as well as any other applicable fees for the course(s) audited. Assistantships and scholarships do not cover audited courses. Audit courses are carried in a student's load only for fee purposes. A student who has registered for a course for audit may not change that status to credit after the last day to add a class. An AU may be given only to a student who has begun a course as an auditor or who has changed status to that of auditor on or before the last day to add a class.

## Foreign Language Proficiency Examinations

The Department of World Languages and Cultures administers proficiency examinations in the following languages:

- French,
- German,
- Italian,
- Latin,
- Russian, and
- Spanish.

The graduate student should consult the major department to learn specific degree requirements. A grade of pass or fail on the proficiency examination will be registered with the College of Graduate Studies.

It is the responsibility of neither the University nor the Department of World Languages and Cultures to tutor students or to recommend tutors for these examinations.

## Commencement

The Graduation application must be completed by stated deadline of the semester the student intends to graduate. Submission of the graduation application is the student's responsibility. There are two graduation ceremonies each year.

- fall commencement at the end of the first semester in December and
- spring commencement at the end of the second semester in May.

Please refer to the "Special Purpose Fees and Service Charges" list as well as the section titled "Other Fees" for information about the graduation fee. The Graduation application can be accessed through *My YSU*.

## 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."

## Catalog of Entry

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

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

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

## Visiting Graduate Students

A visiting graduate student is defined as one who is completing graduate academic work at Youngstown State University for credit at another university. All visiting graduate students shall be required to be granted visiting student status while engaged in academic work at YSU. Applications for visiting student status are available from the College of Graduate Studies. Visiting student status shall provide access to the following campus resources (fees may be required):

- a YSU identification card;
- access to campus buildings and laboratories, including computer labs;
- use of library facilities; and
- campus parking.

## The Code of Student Rights, Responsibilities, and Conduct

Youngstown State University is “a student-centered institution committed to the education, development, well-being, and success of students of all ages and from all walks in life. In concert with our mission to help students grow intellectually, we strive to foster their personal, social, emotional, and career growth, as well as their capacities for lifelong learning, civic responsibility, and leadership...

As a campus community, we expect all conduct to be rooted in integrity, mutual respect, and civility. We:

- value ethical behavior in scholarly and other endeavors;
- believe in the dignity and worth of all people;
- strive to foster an appreciation of, and respect for, differences among the human race; and
- celebrate the diversity that enriches the University and the world.” (Excerpt from YSU core values.)

As a member of a higher education community, students have an obligation to conduct themselves in a manner that is compatible with the University’s purposes as an institution of higher education. Each student is expected to be fully acquainted with all published policies, procedures, and regulations of the University and is held responsible for compliance with them. All members of the University community are expected to assume responsibility for creating an environment conducive to the educational mission and purpose of the University.

The policies and regulations as outlined in *The Code of Student Rights, Responsibilities, and Conduct* (hereafter referred to as *The Code*) have been established to ensure a positive educational experience for every student. *The Code* serves as an official University document that outlines conditions and regulations considered essential to the effective functioning of the University.

The student conduct process at Youngstown State University adheres to procedural due process and is intended to be part of the educational process at the University. This student conduct process provides a forum for the impartial and expedient resolution of misconduct in the University community and encourages students to live responsibly and be accountable for their actions. The student conduct process is based on the University’s commitment to developing integrity, respect, and responsibility among all students. *The Code* is available online at the YSU website or in hard copy from the Office of Student Life.



# TUITION, FEES AND CHARGES

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

## Application for Involuntary Withdrawal

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

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

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

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

## Billing

Student accounts are billed each semester (bills will be issued approximately the 15th of July for the Fall semester and 15th of December for the Spring semester, and payments are due approximately the 10th of the following month respectively). ALL tuition statements will be issued electronically and must be viewed on line. Paper bills are never mailed. If you need a paper copy of your statement, you may print it directly from the website. 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 MyYSU Portal:

Go to View My Bill ([https://my.yzu.edu/cp/home/displaylogin?goto=https%3A//my.yzu.edu/cp/ip/login%3Fsys%3Dscstsb&url=https%3A//scstsap.admin2.yzu.edu%3A8443/pls/PRODS/zwgktnet.P\\_Redirect%3FformTarget%3D\\_self](https://my.yzu.edu/cp/home/displaylogin?goto=https%3A//my.yzu.edu/cp/ip/login%3Fsys%3Dscstsb&url=https%3A//scstsap.admin2.yzu.edu%3A8443/pls/PRODS/zwgktnet.P_Redirect%3FformTarget%3D_self)) and log in to review statements and make online payments or enroll in payment plan, establish an authorized user, view holds, select tax information.

**YOU ARE STRONGLY ENCOURAGED TO PAY YOUR BILL ONLINE AT YSU.EDU/VIEWMYBILL.**

**You may also make payment:**

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

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

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

You may pay online by echeck (no additional charge) or with Visa, MasterCard, or Discover. Effective May 1, 2018 there is a 2.85% convenience fee, minimum of \$3.00, for payments made by credit card.

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

Your enrollment at the University creates a contract between you and YSU. If you choose not to attend the University, you must officially withdraw from all courses by the 14th day to receive 100% refund or reduction of charges. All days of the week are counted, including weekends and holidays, to determine the 14th day. 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 MyYSU Portal.

You may also enroll in a payment plan, for current term charges, through the MyYSU 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.

Students may designate another individual as an "authorized user(s)" by going to [ysu.edu/viewmybill](https://my.yzu.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.yzu.edu/C21820\\_tsa/web/login.jsp](https://epay.yzu.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 [ysu.edu/viewmybill](https://my.yzu.edu/viewmybill) link.

Questions regarding billing and/or payment of fees should be directed to the Office of University Bursar at (330) 941-3133, or in person at Room 227, Meshel Hall. Any payments received via the online payment website will be applied to the oldest charges first. Please note that the University reserves the

right to change any fee at any time, without notice, by action of the University Board of Trustees.

## 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. The rate is per academic semester hour of credit for one to 12 credits or for more than 18 credits; it is a flat rate for students registering for 12 to 18 credits during one term. Students registering for 18 or more credits pay the flat rate plus the per-credit rate for each credit over 18. This fee supplements the state subsidy and is a source of revenue for the University's educational and general fund.

#### GENERAL FEE

This fee is also assessed to all graduate students each term; the rate depends upon the number of credits registered for. This fee is for non-instructional services such as Kilcawley Center, intercollegiate athletics, intramural sports, performing artists and lecture programs, and student government.

#### INFORMATION SERVICES FEE

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

#### NON-RESIDENT TUITION SURCHARGES

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

#### AUDITED COURSES

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

#### 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.

#### 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 fully online programs.

#### GRADUATION FEE

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

#### GRADUATE CONSORTIAL PROGRAM MFA

The Northeastern Ohio Universities Master of Fine Arts in Creative Writing is offered in a consortium of the 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 all four institutions to offer graduate programs that meet clearly defined regional needs. The hourly tuition rate is calculated annually based on the highest general fund and the highest instructional fee between the four institutions, approved by the fiscal representatives, and approved by the board of trustees at each institution. The tuition collected 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 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 Council 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.

#### NURSE ANESTHETIST PROGRAM SURCHARGE

This fee is charged to graduate students in the CRNA track of the M.S.N. degree 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.

#### LATE ADD FEE

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

#### LATE APPLICATION FOR GRADUATION

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

#### LATE PAYMENT FEES

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

## LATE REGISTRATION FEE

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

## 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.

## PARKING FEE (OPTIONAL)

This fee is optional each term for graduate students registered for less than six credit hours in courses designated as on-campus. This fee is charged, upon request of the parking permit via MyYSU portal – and will appear on students' accounts as a "parking fee." The "optional" fee and parking permit will also allow the student to have unlimited access to shuttle service. Students requesting the parking permit after the 14th day of the term will not have the permit issued or shuttle services made available until payment of the fee. The fee supports the operating and maintenance costs of campus parking facilities, roadways and sidewalks, as well as student shuttle service. The fee does not guarantee an available space in any particular lot. Some facilities are restricted (e.g. for students only, for faculty and staff only, or resident hall residents only). The current Driving and Parking Regulations pamphlet and parking lot map should be consulted. The fee is refundable only if the student returns the permit access card, validation sticker, and has less than six credit hours in courses designated as on-campus 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.

## 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.

## TECHNOLOGY/LABORATORY MATERIALS 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 First Year Materials 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.

## TESTING FEES

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

## TRANSPORTATION FEE

This fee is charged to all graduate 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 MyYSU 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 6 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 Tech Desk will NOT be able to perform the service, and no fee will be charged to the student.

### HEALTH CENTER FEE

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

Full service primary care practice

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

Mental health services

- Mental health, behavioral health and addiction issues addressed
- Two half-days per week
- Psychiatrist and psychiatric advanced practice provider

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

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

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

For more information, visit Student Health Clinic ([https://urldefense.proofpoint.com/v2/url?u=https-3A\\_\\_na01.safelinks.protection.outlook.com\\_-3Furl-3Dhttp-253A-252F-252Fcc.y-su.edu-252Fstudent-2Dservices-252Fhealth-252Findex.shtml-26data-3D02-257C01-26xQJcRXz9HEuzGuaCNct2w987NZ-bET0zrhs2k&m=8kacwib7CM04EQxVIG016lbLSjdIBs1QdUi5vJ\\_zl8A&s=2fo5iw6ZMkMxXmIqUmogdVkkKvmmjLNLaReQzIQG2Rs&e=\)](https://urldefense.proofpoint.com/v2/url?u=https-3A__na01.safelinks.protection.outlook.com_-3Furl-3Dhttp-253A-252F-252Fcc.y-su.edu-252Fstudent-2Dservices-252Fhealth-252Findex.shtml-26data-3D02-257C01-26xQJcRXz9HEuzGuaCNct2w987NZ-bET0zrhs2k&m=8kacwib7CM04EQxVIG016lbLSjdIBs1QdUi5vJ_zl8A&s=2fo5iw6ZMkMxXmIqUmogdVkkKvmmjLNLaReQzIQG2Rs&e=)))

## HOUSING CHARGES

University housing is available for the academic year and summer terms. The academic year contract includes fall and spring terms. Charges are billed each semester. The housing contract includes room and meal plan. Payment and refunds are as scheduled in the housing contract. Meal plans are also available for students who are not residents in University Housing.

## IDENTIFICATION CARD REPLACEMENT CHARGE

A nonrefundable charge is made for replacement of an ID card.

## 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.

## RETURNED CHECK, ACH (ELECTRONIC CHECK), OR CREDIT CARD CHARGE

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

## STUDENT LOCKER RENTAL

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

## 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://cms.y-su.edu/administrative-offices/parking-services/rules-regulations>) for detailed information.

### STUDENT CODE OF CONDUCT VIOLATION

Fines may be assessed to students who have violated the Student Code of Conduct. These fines can be assessed by the Student Conduct Administrator or the Student Conduct Board after a disciplinary hearing. For a complete list of the possible fines that could be assessed to a student who is found responsible, please visit the Student Conduct Office website at [www.y-su.edu/administrative-offices/student-conduct/art-iv-sect-g](http://www.y-su.edu/administrative-offices/student-conduct/art-iv-sect-g) (<https://cms.y-su.edu/administrative-offices/student-conduct/student-code-conduct>).

## 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](http://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. Late and/or partial payments are subject to late payment fee assessment.

### YOU ARE STRONGLY ENCOURAGED TO PAY YOUR BILL ONLINE AT YSU.EDU/VIEWMYBILL.

**You may also make payment:**

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

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



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

You may pay online by echeck (no additional charge) or with Visa, MasterCard, or Discover. Effective May 1, 2018 there is a 2.85% convenience fee, minimum of \$3.00, for payments made by credit card.

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

A payment plan is also available that will allow you to spread your payments out over a longer period. Payment plan enrollment must be processed online and requires an initial payment at the time of enrollment. There is a fee for enrollment in the payment plan, and late payments are subject to late payment fee assessment.

## Graduate Rates

### Student Fees and Charges

Effective Fall 2018

(Instructional Fee, General Fee, and Information Services 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 9 hours and above.

#### TUITION

##### INSTRUCTIONAL FEE

###### Graduate Tuition

1 to 11 credits	\$437.83	per credit hour
12 to 18 credits	\$5,253.96	per semester
Over 18 credits	\$437.83	per credit hour

###### Graduate Consortial Programs Tuition:

Master of Fine Arts	\$557.00	per credit hour
Master of Public Health	\$588.00	per credit hour

###### Graduate Workshops

###### Special Tuition Rates:

In-State Participant	\$157.84	per credit hour
Non-Regional Participant	\$168.32	per credit hour

###### Doctoral Tuition

1 to 11 credits	\$455.00	per credit hour
12 to 18 credits	\$5,460.00	per semester
Over 18 credits	\$455.00	per credit hour
Nurse Anesthetist Program Surcharge	\$2,895.29	per semester

##### GENERAL FEE

1 to 11 credits	\$56.97	per credit hour
12 to 18 credits	\$683.64	per semester
Over 18 credits	\$56.97	per credit hour

##### INFORMATION SERVICES FEE

1 to 11 credits	\$10.00	per credit hour
12 to 18 credits	\$120.00	per semester
Over 18 credits	\$10.00	per credit hour

##### NON-RESIDENT TUITION SURCHARGE INFORMATION

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

##### AFFORDABLE TUITION ADVANTAGE SURCHARGE

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

(Includes on-campus students who are out of state and out of the Affordable Tuition Area)

1 to 11 credits	\$250.00	per credit hour
12 to 18 credits	\$3,000.00	per semester
Over 18 credits	\$250.00	per credit hour

##### DISTANCE LEARNING OUT OF STATE FEES

(Includes students who are enrolled in distance education programs who are out of state and out of the Affordable Tuition Area)

###### Graduate 12-18 credit hours bulk rate

Level 1	\$3,122.40
Level 2	\$3,194.40
Level 3	\$3,338.40
Level 4	\$3,518.40
Level 5	\$3,698.40

###### Graduate 1-11 credit hours and over 18 credit hours

Level 1	\$260.20
Level 2	\$266.20
Level 3	\$278.20
Level 4	\$293.20
Level 5	\$308.20

##### HOUSING CHARGES

###### Housing Charges

Room and Board per academic year	\$9,312.00 (Payable as follows: \$4,656.00 fall semester, and \$4,656.00 spring semester)
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Residence Hall Application Fee (academic year and/or summer)	\$35.00
Single Room Surcharge	\$1,400.00 per semester

###### Student Housing During Academic Breaks

1 to 3 days (no meals, per day)	\$26.00
Per week (no meals, per week)	\$182.00

###### Summer

Summer Room and Board	\$285.00 (includes 10 meals per week)
Weller House Apt rates prorated for current tenants	\$400.00 per month

**Voluntary Board Plan** (students not in University housing) go to <https://www.dineoncampus.com/ysu/meal-plan-purchase>

<b>Weller House Apartments</b> (per Academic Year - room only)	
Two Bedroom Family Unit	\$10,000.00
One Bedroom single unit	\$8,000.00
Shared apartments with single bedrooms	\$7,000.00
<b>Courtyard Apartments</b> (room only, per person)	
1 bed/ 1 bath	\$815.00 per month
2 bed/ 2 bath	\$690.00 per month
4 bed/ 2 bath	\$600.00 per month
<b>Courtyard Expanded Room Rates</b>	
4 bed converted to 6 bed (single bed)	\$400.00 per month
4 bed converted to 6 bed (full-size bed)	\$500.00 per month

**VOLUNTARY BOARD PLAN (STUDENTS NOT IN UNIVERSITY HOUSING) PLEASE GO TO [HTTPS://WWW.DINEONCAMPUS.COM/YSU/MEAL-PLAN-PURCHASE](https://www.dineoncampus.com/YSU/MEAL-PLAN-PURCHASE) (<https://www.dineoncampus.com/ysu/meal-plan-purchase>) OR CALL DINING SERVICES AT EXT. 3391.**

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

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

**SPECIAL-PURPOSE FEES**

Art Usage Fee	\$29.00 per course
College Level Examination Program Test Fee (CLEP)	\$25.00
College over 60 Registration fee	\$5.00
Course Book, eBook, and instructional supplies	Variable
Credit by Examination <sup>1</sup>	\$20.00 per credit hour
Deferred Payment fee (employer paid only)	\$50.00
Equipment & Materials Replacement Fee	Market value
Federal Background Check	\$28.00
Graduate Student Application Fee	\$45.00
Graduation Fee	\$65.00
Graduation Fee Late Application (after 3rd wk. of term)	\$38.50
Health Center Fee	\$34.00 per semester
HPE Equipment Replacement Fee	Market value
Installment Payment Plan Enrollment Fee	\$50.00 per semester maximum
Internal Revenue Service/1098T penalty for incorrect name/SSN match	\$100.00
International Graduate Student Credential Evaluation	\$45.00
International Student Health Insurance	pass-thru charge, set by Ins. Carrier-Variable
International Student Program Fee	\$75.00 per semester
Late Class Add Fee (Charged for each course added after the last published date to add a class)	\$50.00 per course
Late Payment Fee	\$50.00 per month
Late Registration Fee	\$75.00
MAT Test	\$90.00
MBA Program Fee	\$50.00 per credit

Ohio Attorney General Payment/Collection Fee	Variable
Parking Per day without permit	\$5.00
Parking Permit – Students, Fall & Spring (optional 0-5 credit hours)	\$115.00 per semester
Parking Permit – Students, Summer Term (optional 0-5 credit hours)	\$58.00
Peace Officer Training Academy Fee	\$300.00 per semester
Performance Music Fee	\$75.00 per credit
Physical Therapy Doctoral Acceptance Deposit	\$500.00
Proficiency Examination <sup>2</sup>	\$45.00 per course
Student Locker Rental	\$25.00 per year
Study Abroad Fee - Faculty Led	Variable - based on actual travel costs
Study Abroad Fee - Individual	\$75.00
<b>Technology/Laboratory Materials Fee</b>	
Level 1	\$35.00 per course
Level 2	\$50.00 per course
Level 3	\$65.00 per course
Level 4	\$300.00 per course
Level 7	\$20.00 per course
Level 8	\$85.00 per course
Level 9	\$25.00 per course
Level 10	\$200.00 per course
Level 11 (cooperative charge)	\$350.00 per course
Level 12	\$300.00 per course
Level 13	\$100.00 per course
Transportation Fee, Fall & Spring Terms (Required 6 plus credit hours listed in campus courses)	\$115.00 per semester
Transportation Fee, Summer Term (Required for 6 plus credit hours listed on campus courses)	\$58.00 per semester
Web-Based Courses Fee (Distance Learning Fee)	\$100.00 per credit hour

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

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

**SERVICE CHARGES**

Check Replacement Fee	\$25.00
Child Preschool Laboratory Fee	\$150.00 per semester
Computer-Based Placement Re-Test	\$20.00 per test
Credit Card Convenience Fee (student accounts only)	2.85% minimum of \$3.00
Duplicate Diploma Fee	\$40.00
Finger Printing Fee	\$37.00 per occurrence
Human Performance and Exercise Science Activity	Variable to cover cost in that course
Intramural Team Deposit	\$10.00 per team
Library Study Carrel Rental	\$25.00
PC Data Recovery Service Fee	\$100.00 per occurrence
PC Remediation Service Fee (if 3 or more occurrences per academic year)	\$75.00
Photo I.D. Replacement Charge	\$25.00
Reading Tutoring Fee	\$38.00 per semester

Returned Check or Credit Card Charge	\$30.00
Rich Autism Center Pre-School Programs	\$125.00 per week
Student Health Insurance	Go To: <a href="http://cms.ysu.edu/administrative-offices/student-health/student-health">http://cms.ysu.edu/administrative-offices/student-health/student-health</a>
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 VIOLATIONS

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 Violations Information (<https://cms.ysu.edu/administrative-offices/parking-services/parking-violations>).

## MAGG LIBRARY & CURRICULUM RESOURCE CENTER FINES & FEES

Overdue charges and loan periods differ by type of materials:

- **Most Library Books, CDs, Videos:** No daily fines. At (15) days past due: \$10.00 processing fee plus the item replacement cost.
- **OhioLINK Materials:** Fine \$0.50 per day to a maximum of \$15.00, plus a \$35.00 processing fee and \$75.00 item replacement cost.
- **Reserves, MMC All Other, CRC Non-Print:** \$0.55 per hour/day to a maximum of \$11.00, plus a \$10.00 processing fee and the item replacement cost.

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

## STUDENT FINES FOR VIOLATIONS OF THE STUDENT CODE OF CONDUCT

Failure to attend Student conduct Conference of Hearing \$25.00; Failure to complete a disciplinary sanction \$25.00; Restitution for lost/stolen/damaged property while in possession \$50 plus restitution.

Substance Abuse Violation: 1st Offense \$75.00; 2nd Offense \$125.00; 3rd Offense \$175.00.

Drug/controlled substance use/possession/unauthorized prescription drug: 1st Offense \$100.00; 2nd Offense \$150.00; 3rd + Offense \$250.00.

Serious Violations of The Student Code of Conduct: Violent/threatening behavior \$150.00; Theft \$150.00; Weapons \$150.00; Drug sales/distribution \$250.00; Other fines corresponding to the nature of the violation up to \$250.00.

THE UNIVERSITY RESERVES THE RIGHT TO CHANGE ANY FEE WITHOUT NOTICE.

# 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 MyYSU 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.

Effective Summer 2009, 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
6 weeks or more	Thru the 14th day	15th day and later
Less than 6 weeks	15% of course duration	More than 15% of the course

**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.

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

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

# STATE RESIDENCY STATUS

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Place of residency for tuition purposes will be determined at the time of admission or readmission by the Office of Graduate Admissions on the basis of the residency rules stated in this section and information supplied on the Application for Admission form.

If the student has any questions about appropriate classification, at the time of application, or any time thereafter, it is the student's responsibility to immediately bring it to the attention of the Office of Undergraduate Admissions for review, as changes to resident status cannot be made retroactive if supporting documentation is received after the first day of the requested semester. Charges may be made to any student improperly classified as an Ohio resident.



# RESIDENT STATUS APPEAL

Appeal for a change in residency classification should be made in writing to the Office of Recruitment and Admissions. The Office may require the student to complete an Application for Nonresident Tuition Surcharge Exemption form. A decision will be sent in writing to the student, who may then appeal the classification in a personal interview.

The student may request the Office of Recruitment and Admissions to arrange an appearance before the Residence Classification Board. Such appearances ordinarily occur within two weeks of the request, if possible. The Residence Classification Board's appellate decision is final.

## Ohio Student Residency for State Subsidy and Tuition Surcharge Purposes

### A. Intent and authority

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

### B. Definitions

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

### C. Residency for subsidy and tuition surcharge purposes

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

1. A student whose spouse, or a dependent student, at least one of whose parents or legal guardian, has been a resident of the state of Ohio for all

other legal purposes for twelve consecutive months or more immediately preceding the enrollment of such student in an institution of higher education.

2. A person who has been a resident of Ohio for the purpose of this rule for at least twelve consecutive months immediately preceding his or her enrollment in an institution of higher education and who is not receiving, and has not directly or indirectly received in the preceding twelve consecutive months, financial support from persons or entities who are not residents of Ohio for all other legal purposes.
3. A dependent student of a parent or legal guardian, or the spouse of a person who, as of the first day of a term of enrollment, has accepted full-time, self-sustaining employment and established domicile in the state of Ohio for reasons other than gaining the benefit of favorable tuition rates. Documentation of full-time employment and domicile shall include both of the following documents:
  - a. A sworn statement from the employer or the employer's representative on the letterhead of the employer or the employer's representative certifying that the parent, legal guardian or spouse of the student is employed full-time in Ohio.
  - b. A copy of the lease under which the parent, legal guardian or spouse is the lessee and occupant of rented residential property in the state; a copy of the closing statement on residential real property located in Ohio of which the parent, legal guardian or spouse is the owner and occupant; or if the parent, legal guardian or spouse is not the lessee or owner of the residence in which he or she has established domicile, a letter from the owner of the residence certifying that the parent, legal guardian or spouse resides at that residence.

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

1. Criteria evidencing residency:
  - a. If a person is subject to tax liability under section 5747.02 of the Revised Code;
  - b. If a person qualifies to vote in Ohio;
  - c. If a person is eligible to receive Ohio public assistance;
  - d. If a person has an Ohio's driver's license and/or motor vehicle registration.
2. Criteria evidencing lack of residency:
  - a. If a person is a resident of or intends to be a resident of another state or nation for the purpose of tax liability, voting, receipt of public assistance, or student loan benefits (if the student qualified for that loan program by being a resident of that state or nation);
  - b. If a person is a resident or intends to be a resident of another state or nation for any purpose other than tax liability, voting, or receipt of public assistance (see paragraph (D)(2)(a) of this rule).
3. For the purpose of determining residency for tuition surcharge purposes at Ohio's state-assisted colleges and universities, an individual's immigration status will not preclude an individual from obtaining resident status if that individual has the current legal status to remain permanently in the United States.

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

1. A person who is living and is gainfully employed on a full-time or part-time and self-sustaining basis in Ohio and who is pursuing a part-time program of instruction at an institution of higher education shall be considered a resident of Ohio for these purposes.
2. A person who enters and currently remains on active duty status in the United States military service while a resident of Ohio for all other legal purposes and his or her dependents shall be considered residents of Ohio for these purposes as long as Ohio remains the state of such person's domicile.

3. A person on active duty status in the United States military service who is stationed and resides in Ohio and his or her dependents shall be considered residents of Ohio for these purposes.
  4. A person who is transferred by his employer beyond the territorial limits of the fifty states of the United States and the District of Columbia while a resident of Ohio for all other legal purposes and his or her dependents shall be considered residents of Ohio for these purposes as long as Ohio remains the state of such person's domicile as long as such person has fulfilled his or her tax liability to the state of Ohio for at least the tax year preceding enrollment.
  5. A person who has been employed as a migrant worker in the state of Ohio and his or her dependents shall be considered a resident for these purposes provided such person has worked in Ohio at least four months during each of the three years preceding the proposed enrollment.
  6. A person who was considered a resident under this rule at the time the person started a community service position as defined under this rule, and his or her spouse and dependents, shall be considered a resident of Ohio while in service and upon completion of service in the community service position.
  7. A person who graduated from an Ohio high school, left the state, and returns to enroll in an Ohio public institution of higher education and establishes domicile in the state.
  8. A person who returns to the state of Ohio due to marital hardship, takes or has taken legal steps to end a marriage, and reestablishes financial dependence upon a parent or legal guardian (receives greater than fifty percent of his or her support from the parent or legal guardian), and his or her dependents shall be considered residents of Ohio.
  9. A person who is a member of the Ohio National Guard and who is domiciled in Ohio, and his or her spouse and dependents, shall be considered residents of Ohio while the person is in Ohio national guard service.
  10. A person who is eligible, or whose benefits have been exhausted or have expired, for benefits under the Post 9/11 Veterans Educational Assistance Act of 2008 or any prior federal act establishing veterans' education benefits, who has been honorably discharged or released from service, who, as of the first day of a term of enrollment, is domiciled in Ohio, and his or her spouse and dependents, shall be considered residents of Ohio for these purposes as long as Ohio remains the state of such person's domicile.
- Documentation determined to be acceptable by the institution:
- a. DD214 or other military document showing honorable discharge.
  - b. Documentation of domicile shall include a copy of the lease under which the person or spouse is the lessee and occupant of rented residential property in the state; a copy of the closing statement on residential real property located in Ohio of which the person or spouse is the owner and occupant; or if the person or spouse is not the lessee or owner of the residence in which he or she has established domicile, a letter from the owner of the residence certifying that the person or spouse resides at that residence.

establishes domicile outside Ohio less than twelve months after accepting employment and establishing domicile in Ohio.

4. Any person once classified as a nonresident must apply to the institution he or she attends for reclassification as a resident of Ohio for these purposes if such person in fact wants to be reclassified as a resident. It is the student's responsibility to initiate contact. Should such person present clear and convincing proof that no part of his or her financial support is or in the preceding twelve consecutive months has been provided directly or indirectly by persons or entities who are not residents of Ohio for all other legal purposes, such person shall be reclassified as a resident. Evidentiary determinations under this rule shall be made by the institution which may require, among other things, the submission of documentation regarding the sources of a student's actual financial support.
5. Any reclassification of a person who was once classified as a nonresident for these purposes shall have prospective application only from the date of such reclassification, effective the following semester.
6. Any institution of higher education charged with reporting student enrollment to the chancellor of the Ohio board of regents for state subsidy purposes and assessing the tuition surcharge shall provide individual students with a fair and adequate opportunity to present proof of his or her Ohio residency for purposes of this rule. Such an institution may require the submission of affidavits and other documentary evidence which it may deem necessary to a full and complete determination under this rule.

## F. Procedures

1. A dependent person classified as a resident of Ohio for these purposes under the provisions of paragraph (C)(1) of this rule and who is enrolled in an institution of higher education when his or her parents or legal guardian removes their residency from the state of Ohio shall continue to be considered a resident during continuous full-time enrollment and until his or her completion of any one academic degree program.
2. In considering residency, removal of the student or the student's parents or legal guardian from Ohio shall not, during a period of twelve months following such removal, constitute relinquishment of Ohio residency status otherwise established under paragraph (C)(1) or (C)(2) of this rule.
3. For students who qualify for residency status under paragraph (C)(3) of this rule, residency status is lost immediately if the employed person upon whom resident student status was based accepts employment and

# FINANCIAL ASSISTANCE

Graduate students may apply for assistantships and fellowships, on campus employment, as well as Federal Financial Aid. Scholarships (p. 203) 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 twelve-month appointment.

**Graduate Assistant/Intern (GA/I)** A GA/I is a special category of graduate assistant designated to provide 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.

**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) will be paid a stipend. The student transportation fee will be remitted during each term of appointment. The department/agency of service will provide a stipend and fringe to the university. A stipend will be paid to the student through the normal stipend process for GA/I appointments.

Assistantship 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 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 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.

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 full-time enrollment (9 semester hours of degree-credit coursework per term for the regular academic year. In addition, students appointed as Graduate Research Assistants must also enroll in at least 6 semester hours during the summer term. With the advisor's approval, graduate coursework that is not part of the graduate assistant's degree program may be counted toward the 18-semester-hour minimum for the assistantship. Approval to carry more than 18 semester hours or fewer than nine semester hours in any semester may be granted by the dean of The College of Graduate Studies only upon clear justification by the student's academic program department. For a TA who is the instructor of record and has a teaching load of five to six semester hours, the minimum required enrollment is six semester hours, but the College of Graduate Studies must be notified of this. For a teaching assistant who is the instructor of record and has a teaching load of four semester hours or less, the minimum required enrollment remains at nine semester hours.

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.

Each assistantship provides a stipend. Graduate assistants may also be awarded a Graduate College Premiere Scholarship 36.0.

## Graduate College Premiere Scholarship

Graduate College Premiere Scholarship is typically provided for 36.0 semester hours

The Graduate College Premiere Scholarship 36.0 provides:

- 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 scholarships require renewal of the scholarship.
- Nonresident tuition surcharge
- Music performance fees (if applicable)

Criteria for Initial Award:

- Acceptance for regular admission to the College of Graduate Studies (Exceptions may be granted by the graduate dean)
- Cumulative undergraduate GPA of 3.0 or higher on a 4.0 scale.
- Recommendation by the appropriate academic dean
- Approval by the dean of graduate studies

To Maintain the Scholarship:

- Student must remain in good standing
- Student must maintain a minimum 3.0 GPA on a 4.0-point scale for all graduate coursework
- Student must maintain enrollment of at least 18 semester hours of degree-credit coursework for the academic year and no fewer than 9 semester

hours in each of the fall and spring semesters (Exceptions may be granted by the graduate dean)

- Making good progress towards degree completion, as determined by the department chair

#### Notes:

- Awards are subject to availability of funds
- This compensation may be subject to taxation
- Typically, the initial scholarship will cover Fall and Spring terms and the renewal of scholarship will include Summer, Fall and Spring.

Failure to meet any of the criteria to maintain this scholarship will result in termination of the scholarship.

Graduate assistants who have been admitted with undergraduate course deficiencies will make up course deficiencies by taking the appropriate courses at their own expense.

Further information regarding assistantship stipends and scholarships is available at The College of Graduate Studies Assistantship and Fellowship website (<http://cms.ysu.edu/college-graduate-studies/assistantships-fellowships>).

#### Guidelines for Graduate Assistant Leave

Circumstances occasionally occur that prevent graduate assistants (including GAs, TAs, and GAls) 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. Long-term 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.

## Graduate Assistant/Intern

A special category of graduate assistant, designated as a graduate assistant/intern (GA/I), 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 a stipend to the University, which will be paid to the student through the normal stipend process. The GA/I will be expected to work in the internship work environment 20 hours per week.

Further information about graduate assistant/intern appointments may be obtained from the College of Graduate Studies.

## 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 a 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.

Doctoral fellows will typically be awarded a Graduate College Premier Scholarship.

## Graduate College Premiere Scholarship

Graduate College Premiere Scholarship is typically provided for 36.0 semester hours

The Graduate College Premiere Scholarship 36.0 provides:

- 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 scholarships require renewal of the scholarship.
- Nonresident tuition surcharge
- Music performance fees (if applicable)

Criteria for Initial Award:

- Acceptance for regular admission to the College of Graduate Studies (Exceptions may be granted by the graduate dean)
- Cumulative undergraduate GPA of 3.0 or higher on a 4.0 scale.
- Recommendation by the appropriate academic dean
- Approval by the dean of graduate studies

To Maintain the Scholarship:

- Student must remain in good standing
- Student must maintain a minimum 3.0 GPA on a 4.0-point scale for all graduate coursework
- Student must maintain enrollment of at least 18 semester hours of degree-credit coursework for the academic year and no fewer than 9 semester hours in each of the fall and spring semesters (Exceptions may be granted by the graduate dean)
- Making good progress towards degree completion, as determined by the department chair

Notes:

- Awards are subject to availability of funds
- This compensation may be subject to taxation
- Typically, the initial scholarship will cover Fall and Spring terms and the renewal of scholarship will include Summer, Fall and Spring.

Failure to meet any of the criteria to maintain this scholarship will result in termination of the scholarship.

Graduate assistants who have been admitted with undergraduate course deficiencies will make up course deficiencies by taking the appropriate courses at their own expense.

Further information regarding assistantship stipends and scholarships is available at The College of Graduate Studies Assistantship and Fellowship website (<http://cms.ysu.edu/college-graduate-studies/assistantships-fellowships>).

## Ph.D. in Materials Science and Engineering Fellowship

The appointee to the Ph.D. in Materials Science and Engineering 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 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 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 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. Normally, one fellowship is awarded per year.

**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 chair of EFRTL 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 be awarded the Graduate College Premiere Scholarship for 20 s.h. Recipient must meet requirements to maintain the scholarship and stipend.

**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 of Educational Foundations, Research, Technology and Leadership.

For further information on the Ed.D. Fellowship please contact Chuck Vergon at (330) 941-1574.

## Federal Financial Aid

Graduate students enrolled in degree programs at YSU may apply for federal financial aid in the Financial Aid and Scholarships Office, 202 Meshel Hall. (See Full-Time Status as it relates to eligibility for federal financial aid. (p. 186))

## On-Campus Student Employment

Graduate students enrolled in degree programs are eligible for on-campus student employment. For information on how to apply, contact the Office of Student Life, Jones Hall.

## Scholarships

### Graduate College Premiere Scholarship

Graduate College Premiere Scholarship is typically provided for 36.0 semester hours

The Graduate College Premiere Scholarship 36.0 provides:

- 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 scholarships require renewal of the scholarship.
- Nonresident tuition surcharge
- Music performance fees (if applicable)

Criteria for Initial Award:

- Acceptance for regular admission to the College of Graduate Studies (Exceptions may be granted by the graduate dean)
- Cumulative undergraduate GPA of 3.0 or higher on a 4.0 scale.
- Recommendation by the appropriate academic dean
- Approval by the dean of graduate studies

To Maintain the Scholarship:

- Student must remain in good standing
- Student must maintain a minimum 3.0 GPA on a 4.0-point scale for all graduate coursework
- Student must maintain enrollment of at least 18 semester hours of degree-credit coursework for the academic year and no fewer than 9 semester hours in each of the fall and spring semesters (Exceptions may be granted by the graduate dean)
- Making good progress towards degree completion, as determined by the department chair

Notes:

- Awards are subject to availability of funds
- This compensation may be subject to taxation
- Typically, the initial scholarship will cover Fall and Spring terms and the renewal of scholarship will include Summer, Fall and Spring.

Failure to meet any of the criteria to maintain this scholarship will result in termination of the scholarship.

Graduate assistants who have been admitted with undergraduate course deficiencies will make up course deficiencies by taking the appropriate courses at their own expense.

Further information regarding assistantship stipends and scholarships is available at The College of Graduate Studies Assistantship and Fellowship website (<http://cms.ysu.edu/college-graduate-studies/assistantships-fellowships>).

### 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.

#### Criteria for the scholarship

Cumulative undergraduate GPA of 3.5 or above

- All undergraduate coursework for the earned bachelor's degree will be included in determining the GPA.

Each scholarship is renewable for up to 6 semesters if the student maintains a 3.0 graduate GPA and 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: [http://www.cgsnet.org/april-15-resolution\(link is external\)](http://www.cgsnet.org/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

### 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:** Counseling Department, 330-941-3257

### 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

Application Form ([http://cms.ysu.edu/sites/default/files/documents/college-graduate-studies/Hendricks\\_Scholarship\\_Application.pdf](http://cms.ysu.edu/sites/default/files/documents/college-graduate-studies/Hendricks_Scholarship_Application.pdf))\*

## 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

Application Form ([http://cms.ysu.edu/sites/default/files/documents/college-graduate-studies/Edgar\\_Scholarship\\_Application.pdf](http://cms.ysu.edu/sites/default/files/documents/college-graduate-studies/Edgar_Scholarship_Application.pdf))\*

## 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 achievement 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) (<http://www.ysu.edu/womensclub>).

# COURSE NUMBERING SYSTEM, ABBREVIATIONS, AND REFERENCE MARKS

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Courses listed in this catalog are of two types.

- Courses in the 5800 series are upper-division undergraduate courses in which graduate students may enroll for graduate credit with the approval of an advisor.
- Courses in the 6900- and above series are graduate-level courses normally open only to graduate students but which undergraduates may elect under conditions outlined in Graduate Courses for Undergraduates. Courses in the 8100 series are doctoral-level courses.
- The abbreviation *s.h.* at the end of a course description stands for “semester hours of credit.” Thus, credit for a three-hour, two-semester course is indicated by the notation 3+3 s.h., meaning three semester hours of credit each semester.
- *Prereq.* stands for “prerequisite.”
- *Comma.* Ordinarily, a comma between numbers (e.g., 6907, 6908) indicates that the course extends throughout the year, but that credit toward graduation is given for each course individually.
- *En dash.* An en dash between numbers (e.g., 6907–6908) indicates that credit is not given toward graduation for the work of the first semester until the work of the second semester is completed, except when special permission is granted by the chair of the department in which the course is given. The first semester of such a course is prerequisite to the second.



# GRADUATE STUDENT GRIEVANCE PROCEDURE

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## Academic Grievances

The Student Academic Grievance Procedure provides students with a formal channel through which complaints concerning academic matters may be heard. A student must attempt to resolve the complaint by first discussing the issue with the faculty member. If the complaint is not resolved at that level, the student should direct his or her complaint to the department chair and, if the complaint is still not resolved, then to the dean of the college.

Complaints not resolved following a discussion with the dean will be considered by an associate provost or designee, who will serve as Judicial Chair. Upon his or her review, the Judicial Chair determines whether the complaint is grievable. If the complaint is grievable, it is presented to the Student Academic Grievance Subcommittee. Per the YSU-OEA Agreement, Article 20, academic matters that may be grieved are the following:

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

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

Students wishing to file a grievance should contact the administrative assistant in the Office of the Provost for an appropriate referral. Further information may be found in the Academic Grievance Guide, which is available online at the Student Success (<http://cms.ysu.edu/administrative-offices/student-success/division-student-success>) homepage. A paper copy may be obtained in the Division of Student Success.

An electronic copy of the Student Academic Grievance Form (<https://www.dropbox.com/s/bbg1w32fdqui29g/Academic%20Grievance%20Form.pdf?dl=0>) is available. An electronic copy of the Student Academic Grievance Procedure (<https://www.dropbox.com/s/5zeuyqckgy281w/Grievance%20Panel%20Procedure%20072917.pdf?dl=0>) is also available.

# GRADUATE FACULTY

Please see the Current Graduate Faculty Listing ([http://webserv.cc.yzu.edu/grad\\_faculty/#](http://webserv.cc.yzu.edu/grad_faculty/#)) for complete list of graduate faculty including Category 2 and 3.

## A

### Dr. Martin A. Abraham

Professor of Civil/Environmental and Chemical Engineering  
Graduate Faculty Member  
B.S., Rensselaer Polytechnic Institute, 1982  
Ph.D., University of Delaware, 1987

### Dr. Samuel Adu-Poku

Professor of Art  
Graduate Faculty Member  
B.A., University of Science and Technology (Ghana), 1987  
Dip. Ed., University of Science and Technology (Ghana), 1988  
M.Ed., University of New Brunswick (Canada), 1995  
Ph.D., University of British Columbia (Canada), 2002

### Dr. Mari L. Alschuler

Associate Professor of Social Work  
Graduate Faculty Member  
B.A., Brown University, 1980  
M.Ed., Teachers College of Columbia University, 1987  
M.S.W., Fordham University, 1990  
Ph.D., Barry University, 2012

### Dr. Isam E. Amin

Professor of Geological and Environmental Sciences  
Graduate Faculty Member  
B.S., University of Khartoum, 1977  
M.S., New Mexico Inst. of Mining and Technology, 1983  
Ph.D., University of Nevada-Reno, 1987

### Dr. Corey E. Andrews

Professor of English  
Graduate Faculty Member  
B.A., Miami University, 1992  
M.A., Ohio University, 1995  
Ph.D., Ohio University, 2000

### Dr. Felicia P. Armstrong

Associate Professor of Geological and Environmental Sciences  
Graduate Faculty Member  
B.S., University of Dayton, 1987  
M.S., Alabama AM University, 1996  
Ph.D., Oklahoma State University, 2003

### Dr. Abdurrahman Arslanyilmaz

Associate Professor of Computer Science and Information Systems  
Graduate Faculty Member  
B.E., Gazi University (Turkey), 1998  
Certificate, Intensive English School, Middle East Technical University (Turkey), 2000  
M.Ed., University of Missouri-Columbia, 2002  
Ph.D., Texas AM University, 2007

### Dr. David K. Asch

Associate Professor of Biological Sciences  
Graduate Faculty Member  
B.S., University of Nebraska-Lincoln, 1981  
M.S., Creighton University, 1983  
Ph.D., University of Kansas Medical Center, 1991

### Dr. Kathleen Aspiranti

Assistant Professor of Counseling, School Psychology, and Educational Leadership  
Graduate Faculty Member  
B.A., Wright State University, 2004  
M.S., University of Tennessee, 2009  
Ph.D., University of Tennessee, 2011

### 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. Rebecca Lee Badaw

Assistant Professor of Management  
Graduate Faculty Member  
B.A., State University of New York at Buffalo, 2008  
M.A., West Chester University of Pennsylvania, 2010  
Ph.D., State University of New York at Buffalo, 2014

### Dr. Snjezana Balaz

Assistant 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

### Dr. Kimberly A. Ballone

Professor of Nursing  
Graduate Faculty Member  
B.S.N., Youngstown State University, 1987  
M.S.N., Kent State University, 1989  
D.N.P., Case Western Reserve University, 2009

### Dr. Rebecca A. Barnhouse

Professor of English  
Graduate Faculty Member  
B.A., Florida State University, 1983  
M.A., University of North Carolina, 1986  
Ph.D., University of North Carolina at Chapel Hill, 1994

### 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. Coskun Bayrak**

Professor of Computer Science and Information Systems  
Graduate Faculty Member  
B.S., Slippery Rock University, 1985  
M.S., Texas Tech University, 1989  
Ph.D., Southern Methodist University, 1994

**Dr. Laura L. Beadling**

Associate 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**

Associate Professor of Counseling, School Psychology, and Educational Leadership  
Graduate Faculty Member  
B.A., University of Akron, 1987  
M.A., Case Western Reserve University, 1991  
Ed.D., University of Akron, 2008

**Dr. Jennifer Behney**

Assistant Professor of Foreign Languages and Literatures and English  
Graduate Faculty Member  
B.A., Capital University, 1995  
M.A., University of Findlay, 1997  
Ph.D., Michigan State University, 2011

**Dr. Christopher M. Bellas**

Associate Professor of Criminal Justice and Forensic Sciences  
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

**Dr. James A. Benedict**

Assistant Professor of Physical Therapy  
Graduate Faculty Member  
B.S., The Ohio State University, 1982  
M.Ed., Kent State University, 1989  
Ph.D., Walden University, 2016

**Dr. Terry Benton**

Assistant Professor of English  
Graduate Faculty Member  
B.S., Youngstown State University, 1999  
M.A., Youngstown State University, 2001  
Ph.D., Kent State University, 2015

**Dr. Kristine Blair**

Dean of the College of Liberal Arts and Social Sciences and Professor of English  
Graduate Faculty Member  
B.A., California State University, 1986  
M.A., California State University, 1988  
Ph.D., Purdue University, 1994

**Dr. Shelley Blundell**

Assistant Professor of Communication  
Graduate Faculty Member  
B.A., Kent State University, 2006  
B.S., Kent State University, 2007  
M.L.S., Kent State University, 2009  
Ph.D., Kent State University, 2015

**Dr. Ewelina Boczkowska**

Associate Professor of Music  
Graduate Faculty Member  
D.E.C., Jean-de-Brebeuf College and Vincent-d'Indy School of Music, 2000  
B.M., McGill University, 2002  
Ph.D., University of California, 2009

**Dr. Brian Bonhomme**

Professor of History  
Graduate Faculty Member  
B.A., City College of the City University of New York, 1993  
M.A., City College of the City University of New York, 1996  
Ph.D., The City University of New York Graduate Center, 2000

**Dr. Philip Sean Brady**

Professor of English  
Graduate Faculty Member  
B.A., Bucknell University, 1977  
M.A., University of Delaware, 1979  
M.A., San Francisco State University, 1986  
Ph.D., State University of New York, 1990

**Dr. Margaret L. Briley**

Assistant Professor of Teacher Education  
Graduate Faculty Member  
B.S., Indiana University of Pennsylvania, 1976  
M.Ed., Georgia State University, 1981  
Ph.D., University of Pittsburgh, 1999

**Dr. Kristin L. Bruns**

Assistant Professor of Counseling, School Psychology, and Educational Leadership  
Graduate Faculty Member  
B.S., University of South Dakota, 2006  
M.A., University of South Dakota, 2008  
Ph.D., Kent State University, 2014

**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**

Associate 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

## C

**Dr. Jonathan J. Caguiat**

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